

## APPLICATIONS FOR ADMISSION AND FOR TRANSFER

The Constitution provides that the Board of Direction shall elect or reject all applicants for *Admission* or for *Transfer*, and, in order to determine justly the eligibility of each candidate, the Board must depend largely upon the Membership for information.

This list is issued to members in every grade for the purpose of securing all such available information, and every member is urged to scan carefully each monthly list of candidates and to furnish the Board with data in regard to any applicant which may aid in determining his eligibility. It is the *Duty* of all *Members* to the *Profession* to assist the Board in this manner.

It is especially urged, in communications concerning applicants, that errors in the record be pointed out and a *Definite Recommendation as to the Proper Grading in Each Case* be given, inasmuch as the grading must be based upon the opinions of those who know the applicant personally, as well as upon the nature and extent of his professional experience. If facts exist derogatory to the personal character or to the professional reputation of an applicant, they should be promptly communicated to the Board. *Communications Relating to Applicants are considered by the Board as Strictly Confidential.*

The Board of Direction will not consider the applications herein contained from residents of North America until the expiration of thirty (30) days, and from non-residents of North America until the expiration of ninety (90) days from December 1, 1928.

### MINIMUM REQUIREMENTS FOR ADMISSION

Grade	General Requirement	Age	Length of Active Practice	Responsible charge of work
Member	Qualified to design as well as to direct work	32 years	12 years*	5 years
Associate Member	Qualified to direct work	25 years	8 years*	1 year
Junior	Qualified for sub-professional work	18 years†	4 years*	
Affiliate	Qualified by scientific acquirements or practical experience to co-operate with engineers			
Fellow	Contributor to the permanent funds of the Society			

\* Graduation from a school of engineering of recognized reputation is equivalent to 4 years' active practice.

† Membership ceases at age of 32 unless transferred to higher grade.

# APPLICATIONS FOR ADMISSION AND FOR TRANSFER

## LIST OF APPLICANTS.

Names and Addresses of Applicants for Admission and for Transfer on this Preliminary List, Arranged Alphabetically.

Name.	Address.	Page.	Name.	Address.	Page.
ALBERT, FRANK M.	Washington, D. C.	363	KERSHAW, ROYCE G.	Jacksonville, Fla.	373
ALLEN, JAMES H.	Pittsburgh, Pa.	363	KNOX, LLOYD B.	Glendale, Cal.	374
ALLING, KENNETH D.	Stamford, Conn.	363	LEVIN, LOUIS F.	S. Ste. Marie, Mich.	374
ALLISON, WILLIAM H.	New Haven, Conn.	363	MACKENZIE, ALAN F. S.	New York City	374
AMODIO, ALFIO F.	Atlantic City, N. J.	364	MCCORMICK, FRANK J.	Ames, Iowa	374
ANDERSEN, PAUL	Brooklyn, N. Y.	364	MCKINSTRY, ROSS W.	Hinsdale, Ill.	374
ANDERSON, HOWELL R.	Graham, Tex.	364	MCWILLIAMS, JOHN L.	Ozone Park, N. Y.	375
ARNSTON, JULIAN A.	Tacoma, Wash.	364	MADDEN, CHARLES M.	Brooklyn, N. Y.	375
ATTAWAY, JOSEPH G.	Atlanta, Ga.	364	MANTHAL, FREDERICK S.	Buffalo, N. Y.	375
BANGERT, NELSON R.	San Bernardino, Cal.	364	MATTHEWS, HARRY G.	Santa Ana, Cal.	375
BARDSLEY, CLARENCE E.	Rolla, Mo.	364	MONTGOMERY, VOL H.	Dallas, Tex.	375
BARNES, JAMES N.	Atlanta, Ga.	365	MORGAN, NATHAN W.	Montpelier, Vt.	375
BEARD, ARTHUR A.	Santa Ana, Cal.	365	MUESER, WILLIAM H.	New York City	375
BERNHANG, SAMUEL	Philadelphia, Pa.	365	MURROW, LACEY V.	Seattle, Wash.	376
BETTS, CLIFFORD A.	Chattanooga, Tenn.	365	NELSON, FREDERICK G.	Mason City, Iowa	376
BHIROMYA, TATT M.	Chumphon, Siam	365	NORCOM, GEORGE D.	New York City	376
BLEIFUSS, DONALD J.	Pittsburgh, Pa.	365	OAKLEY, KENNETH H.	Cleveland, Ohio	376
BROWN, EDGAR A.	San Francisco, Cal.	366	OHLESEN, WALTER C.	Chicago, Ill.	377
BURGESS, ROY A.	New York City	366	OLIVER, WILLIAM A.	Cleveland, Ohio	391
BUXTON, FRANK E.	Shrewsbury, Mass.	366	O'NEILL, JOHN H.	New Orleans, La.	377
CALDWELL, LESTIE C.	Oyster Bay, N. Y.	366	OSTLAND, RICHARD E.	Brookfield, Ill.	377
CARLSON, ELMER W.	Minneapolis, Minn.	367	PALMER, CYRUS E.	Urbana, Ill.	377
CARTER, IKE N.	Moscow, Idaho	367	PAPE, HENRY J. C.	Warsaw, Poland	377
CHARLES, SEWARD	Washington, D. C.	367	PETERSON, FREDERICK G.	Starbuck, Minn.	378
CHASE, ROLLAND W.	College, Alaska	389	PRITCHETT, HENRY C.	Austin, Tex.	378
COBB, WILLIAM C.	St. Louis, Mo.	368	RHODES, CHAUNCEY L.	Columbus, Ga.	387
COBREALE, WILLIAM H.	New York City	390	ROBISON, CHARLES J.	New York City	378
CONVERT, GEORGE S., JR.	Jackson, Miss.	368	RUETTGERS, ARTHUR	Ellensburg, Wash.	378
COYKENDALL, CLAUDE C.	Ames, Iowa	384	RUSSELL, GEORGE R.	Wichita Falls, Tex.	388
CRANDALL, HOWARD L.	Baltimore, Md.	368	SALMOND, IRVING M.	Detroit, Mich.	379
CROWLEY, ORVILLE W.	Des Moines, Iowa	385	SANDBECK, HANS C.	Poughkeepsie, N. Y.	391
DAVIDSON, ALFRED H., JR.	Del Rio, Tex.	368	SANFORD, LESTER M.	Rochester, N. Y.	388
DOLIVER, EMERSON	Seattle, Wash.	390	SCHLEY, JULIAN L.	Balboa Hgts, Panama	379
DONOHUE, JERRY	Sheboygan, Wis.	369	SCHUTZ, MAX A.	Youngstown, Ohio	379
DUBOIS, ROBERT S.	Bayonne, N. J.	385	SEXTON, CLARENCE W.	N. Victoria, Australia	388
ELKINS, JAMES H.	Birmingham, Ala.	369	SHAW, EUGENE J.	Bucaramanga, Colom.	379
FAIRCLOTH, JAMES M.	University, Ala.	369	SHAW, FORBES D.	Brooklyn, N. Y.	380
FOX, FREDERICK J.	Bronx, N. Y.	369	SHAW, GERALD E.	Montreal, Que.	392
FRANKLAND, JAMES	Portland, Ore.	370	SIMONS, EDWARD W.	San Francisco, Cal.	380
GRACE, WILLIAM R.	Holdenville, Okla.	370	SMALL, HERBERT W., JR.	Arvida, Que., Canada	380
GREEN, JOHN W.	San Francisco, Cal.	370	STAFFORD, PAUL H.	Maryville, Tenn.	380
GREGORY, ROBERT L.	Glendale, Cal.	370	STEWART, LOWELL O.	Ames, Iowa	380
GRIFFIN, WRAY W.	Worcester, Mass.	371	SUCRE, FRANCISCO J.	Bale, Switzerland	381
HALL, QUINCY A.	St. Paul, Minn.	371	TERRY, CHESTER W.	Houston, Tex.	381
HARRISON, KENNETH J.	Eagle Rock, Cal.	371	THEOBALD, JOHN J.	New York City	381
HARTIGAN, AUGUSTUS F.	Hammond, Ind.	372	THOMASSEN, VICTOR G.	Brooklyn, N. Y.	389
HASSLER, HARRY J.	Asheville, N. C.	385	TIO, AURELIO	S. German, Porto Rico	381
HATCH, BERNARD F.	Columbus, Ohio	372	TONNEY, GEORGE E.	San Francisco, Cal.	381
HAWLEY, GEORGE W.	Berkeley, Cal.	386	VALDES, AGUSTIN M.	Mexico, D. F., Mex.	382
HAZARD, HENRY N.	Bethlehem, Pa.	390	VRYDAGH, JULIAN A.	Los Angeles, Cal.	382
JAGGER, JAMES E.	Birmingham, Ala.	391	WEIBEL, SAMUEL R.	Newark, N. J.	382
JAMESON, JOHN A., JR.	Bingham, Me.	391	WEINRIE, JACOB J.	St. Albans, N. Y.	392
JEUNE, JAMES F. D.	Temuka, N. Z.	391	WHITENER, JOHN S.	Raleigh, N. C.	382
JOHNSON, WESTON M.	P. Castila, Honduras	372	WIEPKING, CHRISTOPHER A.	Milwaukee, Wis.	383
JONES, EDMUND H.	La Paz, Bolivia	372	WILSON, WINFRED E.	Los Angeles, Cal.	383
KASHKIN, CONSTANTIN N.	Leningrad, U. S. S. R.	373	ZAKI, IBRAHIM M.	Giza, Egypt	383
KEENAN, THOMAS H.	Brighton, Mass.	373			

Contributor to the Department  
Funds of the Society

Fellow

\* Graduation from a school of engineering or recognized reputation is equivalent to 4 years active practice.  
Membership ceases at age of 22 unless transferred to higher grade.

The fact that applicants give the names of certain members as references does not necessarily mean that such members endorse.

The number in the center above each record indicates the serial number of the applicant for the current year, and that at the left the district in which he resides.

The abbreviations in *Italics* represent, respectively, *TT*, Total Time; *SP*, Sub-Professional Work; *P*, Professional Work; *RC*, Responsible Charge; *D*, Design. The figure for Total Time is determined by adding one-half the time spent in Sub-Professional Work to the time spent in Professional Work. The figures showing the amount of time spent in Responsible Charge and on Design are the estimate of the Applicant. The allowance of four years for graduation and of one-half of a year for each academic year successfully completed in an engineering college without graduation is included in Total Time and Professional Work.

## FOR ADMISSION

1479

(5) ALBERT, FRANK MEYER, U. S. Coast and Geodetic Survey, Washington, D. C. (Age 29. Born Camden, N. J.) 1926 B. S. in Civ. Eng., George Washington Univ. *TT* 4: *P* 4. July 1918 to date with U. S. Coast and Geodetic Survey, until Sept. 1920 as Apprentice Draftsman, acting as Rodman, Recorder, Observer and Jun. Watch Officer on survey ships, from Sept. 1920 to Nov. 1926 Draftsman inking and verifying survey field sheets and construction of map projections, and since Nov. 1926 Cartographic Draftsman, on construction, compilation and revision of nautical charts and maps, computations, etc. *TT* 9.2: *SP* 1: *P* 8.2: *RC* 2. *TT* 13.2: *SP* 1: *P* 12.2: *RC* 2. Refers to F. S. Borden, C. A. Bowman, O. B. French, J. H. Hawley, J. R. Lapham, R. S. Patton.

1480

(6) ALLEN, JAMES HALE, 507 Westinghouse Bldg., Pittsburgh, Pa. (Age 31. Born Lawrence, Mass.) 1922 B. S., Mass. Inst. Tech. *TT* 4: *P* 4. July 1922 to Sept. 1923 with A. E. Stelnert, Gen. Contr., Lawrence, Mass., on surveying, estimates, inspection and general supervision of construction of swimming pools, schools, office and residential buildings. *TT* 0.8: *SP* 0.5: *P* 0.3. Sept. 1923 to July 1924 in private practice at Lawrence, surveying, subdivision layouts, topography, engineering service to contractors, etc. *TT* 0.8: *P* 0.8: *RC* 0.8. July to Dec. 1924 with Dept. of Eng., Lawrence, acting as Inspector and Foreman on street improvement. *TT* 0.2: *SP* 0.2. April 1925 to date with Morris Knowles, Inc., Engrs., Pittsburgh, Pa., chiefly as Asst. Engr. of City Planning Div., preparing zoning ordinances, thoroughfare and city plans for municipalities, also investigation, design and report on water supplies, sewerage systems and valuation, including design of impounding dam for new Western Penitentiary, Pa., concrete design of carbon dioxide and iron removal plant for Parkersburg, W. Va., investigation and report on sewerage systems for Bradford, Pa., Kenmore, N. Y., and Jones & Laughlin Steel Corporation at Allquippa, Pa. *TT* 3.3: *SP* 0.2: *P* 3.1: *RC* 1.8: *D* 0.5. *TT* 9.1: *SP* 0.9: *P* 8.2: *RC* 2.6: *D* 0.5. Refers to E. H. Aldrich, F. C. Foote, J. A. Fulkham, N. B. Jacobs, M. G. Mansfield, C. E. Portas, E. S. Taub.

1481

(1) ALLING, KENNETH DAVENPORT, Revonah Ave., Stamford, Conn. (Age 25. Born Stamford, Conn.) 1928 B. S., Sheffield Sci. School. *TT* 4: *P* 4. Refers to C. T. Bishop, J. C. Tracy.

1482

(2) ALLISON, WILLIAM HENRY, 186 St. Ronan St., New Haven, Conn. (Age 36. Born Beacon, N. Y.) 1917 B. S., Dartmouth Coll. 1918 C. E., Thayer School of Civ. Eng. *TT* 4: *P* 4. Feb. 1919 to June 1923 Bridge Inspector, Jun. Engr. and Asst. Engr., and June 1925 to Feb. 1926 Asst. Engr., Southern Ry. Co., inspecting, detailing, designing and estimating in Bridge Dept. *TT* 4.6: *SP* 0.4: *P* 4.2: *RC* 2.6: *D* 2.6. July 1923 to Aug. 1924 Appraisal Engr. with Rice & Ilsley, on industrial plants. *TT* 1: *P* 1. Aug. 1924 to June 1925 Draftsman, Baltimore

& Ohio R. R. Co., estimating, designing and some detailing in Bridge Dept. TT 0.8: P 0.8: D 0.8. June 1926 to date Instructor in Civ. Eng., Structural Eng., Yale, Sheffield Sci. School. TT 2: P 2. TT 12.4: SP 0.4: P 12: RC 2.6: D 3.2. Refers to C. T. Bishop, C. F. Chase, R. Fletcher, C. A. Holden, A. B. Halsey, G. M. Keith, G. B. Taylor, J. C. Tracy.

1483

(4) AMODIO, ALLIO FRANK, 506 Schwehm Bldg., Atlantic City, N. J. (Age 35. Born Newark, N. J.) 1919 graduate in Arch. Design, Ecole des Beaux Arts, Paris, France. 1914 C. E., and 1924 B. M. Sc., Pa. Mil. Coll. TT 4: P 4. Oct. 1915 to Feb. 1916 Instrumentman, and Feb. 1916 to July 1917 Inspector, E. I. DuPont Co., Carneys Point, N. J., light railway construction. TT 0.5: SP 0.5. 1917 to 1919 Officer, U. S. Army, Transportation Corps, Engrs., in U. S. and A. E. F., France. 1921 to date in private practice of architecture and engineering at Atlantic City, N. J.; designed various buildings, including Chelsea Safe Deposit & Trust Co. (1922) St. Michael's and Dante Community House and School (1923), Ford & Lincoln Bldg. (1923 to 1924) Venice Apartment (1925), Atlantic Finance Co., construction work (1924 to 1925) Somers Point and Mano building operations (1927 to 1928), residence work, etc. TT 9.7: P 9.7: RC 9.4: D 7.3. TT 14.2: SP 0.5: P 13.7: RC 9.4: D 7.3. Refers to J. W. Hackney, C. E. Myers, A. H. Nelson, P. F. Rossell, J. G. Shryock, H. J. Wild.

1484

(15) ANDERSON, HOWELL RUFUS, Box 456, Graham, Tex. (Age 29. Born Stamford, Tex.) 1924 B. S. in C. E., Agri. and Mech. Coll. of Tex. TT 4: P 4. Jan. to April 1920 Rodman for C. E. Leonard in Haskell County, Tex. TT 0.2: SP 0.2. Nov. 1921 to Sept. 1923 and June 1924 to March 1927 Asst. Highway Engr. on State and Federal Aid projects, until Sept. 1923 in Stephens County, Tex., supervising grading and bridging and after June 1924 in Baylor County, Tex., in charge of construction of grading, bridging and surfacing. TT 4.6: P 4.6: RC 3.7: D 3. April to Oct. 1927 Maintenance Supt., Texas State Highway Dept., Div. No. 3, in charge of maintenance in eight counties. TT 0.6: P 0.6: RC 0.6. Nov. 1927 to July 1928 Asst. to Supt. of Julian C. Feild Co., Gen. Contrs. TT 0.4: SP 0.4. Aug. 1928 to date Asst. Engr., Young County, Tex., in charge of plans, grading, bridging and surfacing of State and Federal Aid projects. TT 0.2: P 0.2: RC 0.2: D 0.2. TT 10: SP 0.6: P 9.4: RC 4.5: D 3.2. Refers to J. C. Feild, C. S. Henning, Jr., G. R. Johnston, J. T. L. McNew, J. J. Richey, J. G. Rollins, H. A. Sawyer.

1485

(10) ATTAWAY, JOSEPH GRADY, 681 Kennesaw Ave. N. E., Atlanta, Ga. (Age 26. Born Acworth, Ga.) 1928 received certificate in C. E., Georgia School of Technology Night School. Jan. 1924 to Dec. 1925 with W. E. Brown Eng. Co., Miami Beach, Fla., 6 months as Rodman, 6 months Draftsman and 1 year Chf. of Party, on survey work, subdivision layout, dredging and filling, street and road construction. TT 1.5: SP 0.5: P 1. Jan. to May 1926 with McDonald & Co., Engrs., Atlanta, Ga., as Chf. of Party and Computer on subdivision layout. TT 0.3: P 0.3. Sept. 1926 to date Engr., Constr. Dept., Atlanta, on sewer location and construction, some design. TT 2.2: P 2.2: RC 1: D 0.2. TT 4: SP 0.5: P 3.5: RC 1: D 0.2. Refers to W. J. Greene, M. R. Hall, W. A. Hansell, C. E. Kauffmann, F. H. McDonald, S. R. Young.

1486

(11) BANGERT, NELSON RICHARD, 650 N. "G" St., San Bernardino, Cal. (Age 23. Born Alton, Ill.) 1928 B. S., Univ. of Cal. TT 4: P 4. June 1928 to date Draftsman, California Dept. of Public Works, Div. of Highways, San Bernardino, Cal. TT 0.2: SP 0.2. TT 4.2: SP 0.2: P 4. Refers to C. Derleth, Jr., F. S. Foote, C. G. Hyde.

1487

(14) BARDSLEY, CLARENCE EDWARD, 404 Walnut St., Rolla, Mo. (Age 34. Born St. Louis, Mo.) 1920 B. S. in C. E., 1922 C. E., and 1924 M. S., Mo. School of Mines and Metallurgy. 1926 Sc. D. Eng., Univ. of Mich. TT 4: P 4. Summers 1927 and 1928 student, Northwestern Univ. 1913 to 1914 and summers 1914 and 1915 Rodman, successively with Missouri Pacific R. R. and Wabash R. R. TT 0.6: SP 0.6. Summer 1917 Draftsman, Pennsylvania R. R. 1917 Field Asst., 1918 Jun. Topographer, and 1924 Associate Topographer, U. S. Geological Survey, mapping, etc. TT 2.5: P 2.5: RC 0.5. 1919 to 1920 Instructor in Mathematics and Civ. Eng., 1920 to 1924 Asst. Prof. of Topographic Eng., and 1925 to date Asst. Prof. of Civ. Eng., Missouri School of Mines and Metallurgy; also summer 1926 Associate Prof. of Highway Eng. and Highway Transportation, Univ. of Michigan. 1926 to 1928 private surveys of property and land drainage, 1927 to 1928 City Engr., Rolla, Mo., on design of curb and gutter, street paving, intersections, culverts, sewers, water lines, public utilities, property surveys, 1928 Acting County Highway Engr. of Phelps County, Mo., and Expert Witness in Court on earthwork dispute and railroad property case, National Slag Association Fellow, Univ. of Michigan (1925 to 1926), at

present John R. Freeman Scholarship Student for Study of European Hydraulics in Germany. TT 9: P 9: RC 9. TT 16.1: SP 0.6: P 15.5: RC 9.5. Refers to H. C. Beckman, H. E. Bilger, C. H. Birdseye, A. H. Blanchard, J. B. Butler, J. R. Freeman, E. G. Harris, H. E. Riggs.

1488

(10) BARNES, JAMES NEWTON, 234 Rawson St. S. W., Atlanta, Ga. (Age 23. Born Woodstock, Ga.) 1923 B. S. in C. E., Ga. School Tech. TT 4: P 4. June 1928 to date draftsman, Road Dept., State Highway Dept. of Georgia. TT 0.3: SP 0.3. TT 4.3: SP 0.3: P 4. Refers to J. H. Archer, R. P. Black, F. C. Snow.

1489

(11) BEARD, ARTHUR A, 1508 West Tenth St., Santa Ana, Cal. (Age 43. Born Harlan, Iowa.) 2 years student, Univ. of Iowa. TT 1: P 1. 1908 to 1918 Chainman, Rodman, Instrumentman and Inspector on various projects, including Los Angeles County Road Dept., California Highway Comm. TT 5: P 5. Jan. 1918 to July 1919 2d and 1st Lieut., 23d Engrs., U. S. Army. TT 1.5: P 1.5: RC 1.5. July 1919 to Feb. 1920, June to Nov. 1920 and April 1922 to Dec. 1923 Res. Engr., Wyoming State Highway Dept. TT 2.7: P 2.7: RC 2.7. April to Aug. 1921 Asst. Res. Engr., and Aug. 1921 to April 1922 Res. Engr., California Highway Comm. TT 0.9: SP 0.1: P 0.8: RC 0.8. April 1925 to March 1926 Inspector, and April 1926 to Jan. 1927 Prin. Asst. City Engr., Santa Ana, Cal. TT 1.1: SP 0.4: P 0.7: RC 0.7. April 1924 to April 1925 Inspector, and Jan. 1927 to date Prin. Asst. Supt. of Highways, Orange County Road Dept., Santa Ana. TT 2.5: SP 0.5: P 2: RC 2. TT 14.8: SP 6.1: P 8.7: RC 7.7. Refers to W. V. Buck, S. V. Cortelyou, N. H. Neff, Z. E. Severson, H. H. Tracy.

1490

(4) BERNHANG, SAMUEL, 3138 French St., Philadelphia, Pa. (Age 32. Born in Austria.) 1921 B. S. in C. E., Univ. of Pa. TT 4: P 4. Summers 1919 and 1920 with Baldwin Locomotive Works, Philadelphia, Pa., on design and detail of locomotive parts. May 1922 to March 1926 with City of Philadelphia, Pa., until Nov. 1922 as Transitman, Bureau of Water, surveying on water-works construction, quantity estimating, drafting and inspecting, then Topographic Draftsman, Bureau of Highways, in charge of drafting for Div. of Street Cleaning, acting as Inspector, structural design of dumping wharf, etc., and after May 1924 Structural Draftsman, Dept. of City Transit, designing and checking structural steel and laying out track work for Broad St. Subway. TT 3.7: P 3.7: RC 2.5: D 1.8. March 1926 to April 1927 Engr. and Chf. Estimator, F. K. Worley Constr. Co., Philadelphia, in complete charge of engineering on about \$500,000 worth of work, in charge of estimating. TT 1.1: P 1.1: RC 1.1: D 0.5. May 1927 to Sept. 1928 in private practice at Phoenixville, Pa., designed several business buildings. Since 1920 also on minor architectural work for B. J. Krakow, Bldr., Philadelphia, design of new and alteration work on small buildings and residences (6 months), structural shop details on mill and office buildings, apartment houses and schools for George S. Reichert and Tait, Bloch & Vaughn, Structural Engrs. (May 1924 to March 1926), and detailing structural steel for fabrication in shop for Thos. H. Livezey Iron Works, Philadelphia (1926). TT 0.8: SP 0.3: P 0.5: RC 0.5: D 0.5. Sept. 1928 to date Senior Structural Draftsman, Dept. of City Transit, Philadelphia, designing, checking and drafting on Broad St. Subway. TT 0.2: P 0.2: D 0.2. TT 9.8: SP 0.3: P 9.5: RC 3: D 3. Refers to M. Barofsky, J. E. Boatrite, G. B. Canaga, J. E. Gill, G. N. Hyland, C. H. Stevens.

1491

(1) BHIROMYA, TATT MAKARA, Chumphon, Siam. (Age 28. Born Patriew, Siam.) 1925 B. S., Mass. Inst. Tech. TT 4: P 4. Aug. 1925 to date with Royal State Rys. of Siam, until Jan. 1926 as Asst. Engr., Technical Service, on design and survey, then Asst. Constr. Engr., Constr. Service on earthwork, survey and bridges, and since April 1926 Acting Maintenance Engr., Maintenance of Ways and Works Service, Bang Kok Dist., and (after Nov. 1926) Chumphon Div. TT 3.2: P 3.2: RC 2.6. TT 7.2: P 7.2: RC 2.6. Refers to J. B. Babcock, 3d; H. K. Barrows, C. M. Spofford. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

1492

(6) BLEIFUSS, DONALD J, 1507 Rockland Ave., Pittsburgh, Pa. (Age 32. Born Stewartville, Minn.) 1920 B. S. in Eng., Univ. of Minn. TT 4: P 4. April 1920 to May 1923 Asst. County Highway Engr., Rice County, Minn., being Inspector on road paving, Chf. of Party on road location and construction, including grading, graveling and paving; in charge of office work designing and estimating roads and bridges on about \$1,000,000 worth of work. TT 3.1: P 3.1: RC 2.6: D 1.5. May 1923 to Aug. 1926 Asst. Hydr. Engr., until Nov. 1924 with Phoenix Utility Co., then with Minnesota Power & Light Co. at Duluth, Minn., on stream

gauging, later in charge of office work on power-site investigation involving preliminary design and estimating, and in charge of draftsmen. TT 3.2: P 3.2: RC 2.7: D 0.9. Aug. 1926 to Jan. 1927 Structural Draftsman, Duquesne Light Co., on steel and concrete design of electrical substations, transmission towers. TT 0.3: P 0.3: D 0.3. Jan. 1927 to May 1928 Design Engr., Byllesby Eng. & Management Corporation, Pittsburgh Branch, Structural Sec., design (calculation and estimating) of steel and concrete for substations, transmission towers, culverts, etc., on a public utility system covering electricity and gas supply, street railways, coal mining and transportation. TT 1.4: P 1.4: D 1.4. May 1928 to date in Hydr. Dept., Aluminum Co. of America, Pittsburgh, checking and criticizing design of hydro-electric plants. TT 0.5: P 0.5: D 0.5. TT 12.5: P 12.5: RC 5.3: D 4.6. Refers to A. W. Bedell, A. S. Cutler, A. C. Giesecke, P. L. Hazard, J. I. Parcel, L. M. Pharis, J. W. Rickey. 1)

## 1493

(13) BROWN, EDGAR ALLEN, 582 Market St., San Francisco, Cal. (Age 34. Born Los Angeles, Cal.) Attended Univ. of Nevada. May 1917 to March 1918 Map Draftsman, Computer, Rodman and Office Asst., and Aug. 1919 to Feb. 1922 Rodman, Instrumentman, Land Classifier, Cultural Surveyor, Asst. Office Engr. for Div. of Water Rights, and Examining Engr. on Humboldt River water rights adjudication, all for Nevada Eng. Dept. TT 1.5: SP 1: P 0.5. April 1918 to July 1919 with U. S. Army, A. E. F., France, being Non-commissioned Officer with Truck Co. F, 1st Army Artillery Park, 1st Army Artillery Headquarters, Postal Express Service. March to Aug. 1922 Storekeeper and Cost Accountant, Idaho Maryland Mines Co., Grass Valley, Cal., in charge of material and stores, also underground surveying. TT 0.5: P 0.5: RC 0.5. Sept. 1922 to March 1924 Asst. and Purchasing Agt., Metals Exploration Co., San Francisco, Cal., handling purchases for six mining properties and materials and equipment for construction of 1200-ton cyanide mill on United Comstock; also purchases for construction of Bullards Bar Dam and Power Plant on North Yuba River, Cal. TT 1.6: P 1.6: RC 1.6. April 1924 to date with Constant Angle Arch Dam Co., San Francisco, as Map Draftsman, Asst. on design of constant angle arch dams, Reinforced Concrete Detailer, hydraulic design and computations, power studies; in charge of matters before State and Federal administrative bodies on power projects, work included investigation, promotion, financing, design and construction of Bucks Creek hydro-electric project on North Fork of Feather River, Cal. TT 4.5: SP 0.3: P 4.2: RC 2: D 2. TT 8.1: SP 1.3: P 6.8: RC 4.1: D 2. Refers to F. E. Bonner, G. E. Goodall, L. R. Jorgensen, A. Kempkey, P. Schuyler, O. Speir, Jr.

## 1494

(1) BURGESS, ROY ARTHUR, 140 Wadsworth Ave., New York City. (Age 26. Born Joplin, Mo.) 1924 B. S. in Civ. Eng., Univ. of Mo. TT 4: P 4. June to July 1924 Chairman, St. Louis San Francisco R. R. TT 0.1: SP 0.1. July to Sept. 1924 Draftsman and Computer with Gibbs & Hill, Inc., New York City, on design of steel transmission-line towers and trolley-hanger lengths for electric railroad. TT 0.2: P 0.2: D 0.2. Sept. to Dec. 1924 Transmittan with Buck & Sheldon, Inc., on city property surveys and construction of Hartford (Conn.) Orphans Asylum. TT 0.3: P 0.3: RC 0.3. Dec. 1924 to Sept. 1925 Chf. of Party, Elec. Bond & Share Co., New York City, on power-line surveys and construction of steam plant, Santiago, Cuba. TT 0.7: P 0.7: RC 0.7. Sept. 1925 to Jan. 1927 Asst. Engr., New York Central R. R. Co., New York City, in charge of valuation for Elec. Div. TT 1.4: P 1.4: RC 1.4. Jan. 1927 to Feb. 1928 Chf. of Party, Lago Petroleum Corporation, New York City, on surveys of oil properties in Venezuela, estimates for construction. TT 1: P 1: RC 1. April 1928 Asst. Engr., Interborough Rapid Transit Co., New York City, in charge of survey party and responsible for protection of structures over subways. TT 0.1: P 0.1: RC 0.1. April 1928 to date Chf. of Party, W. & A. Smadbeck, Inc., on real-estate developments, subdivision, road layouts and monumenting. TT 0.6: P 0.6: RC 0.6. TT 8.4: SP 0.1: P 8.3: RC 4.1: D 0.2. Refers to E. J. McCaustland, J. R. Stubbins, R. P. Thompson, P. L. Voss, R. R. Wiggins, M. H. Willis, A. D. Wolff, Jr.

## 1495

(2) BUXTON, FRANK EUGENE, 11 Grafton St., Shrewsbury, Mass. (Age 22. Born Eastford, Conn.) 1928 B. S. in C. E., Worcester Pol. Inst. TT 4: P 4. April to Oct. 1928 Rodman, Sherman Power Constr. Co., Bellows Falls, Vt. Summer 1927 Instrumentman, and July 1928 to date Inspector, Transmission Line Dept., New England Power Constr. Co. TT 0.3: SP 0.3. TT 4.3: SP 0.3: P 4. Refers to A. W. French, J. W. Howe, A. J. Knight, C. F. Meyer, H. F. Taylor.

## 1496

(1) CALDWELL, LESLIE CHARLES, 15 Kellogg St., Oyster Bay, N. Y. (Age 25. Born Nashville, Tenn.) Licensed Surveyor, New York State. Aug. 1919 to Jan. 1920 Rodman and Estimator, City Wastes Disposal Co., New York City, on surveys. TT 0.2: SP 0.2.

March 1920 to Feb. 1921 Instrumentman and Planetable Topographer, R. H. Randall & Co., Toledo, Ohio, on topographic map of Summit County, Ohio. TT 0.5: SP 0.5. Aug. 1921 to Jan. 1922 Instrumentman, Computer and Draftsman, with Eugene R. Smith, C. E., Islip, N. Y., engineering and surveying. TT 0.2: SP 0.2. Jan. to May 1923 Instrumentman with Sanderson & Porter, Hydro Elec. Engrs., New York City. TT 0.1: SP 0.1. May to Aug. 1923 Field Engr. with Fuller & McClintock, Gen. Engrs., New York City, in charge of field work on assessment map. TT 0.2: SP 0.2. Aug. to Nov. 1923 Field Engr. and Surveyor with H. F. Bishop, Westhampton Beach, N. Y., municipal field engineering and land surveys. TT 0.2: SP 0.2. Nov. 1923 to Feb. 1924 Surveyor (Chf. of Party), Phoenix Utility Co., Allentown, Pa., on hydro-electric investigation surveys. TT 0.2: SP 0.2. Feb. 1924 to Aug. 1925 Field Engr. and Inspector, New York Steam Co., New York City, in charge of line and grade work, investigations and inspection of construction of steam mains. TT 1.3: SP 0.2: P 1.1: RC 1.1. Sept. 1925 to Feb. 1926 Surveyor (Chf. of Party) with W. H. Halsey, Southampton, N. Y., general engineering and surveying, survey of 10 000 acres on Long Island. TT 0.4: P 0.4: RC 0.4. Feb. 1926 to date in private practice as Surveyor. TT 2.7: P 2.7: RC 2.7. TT 5.8: SP 1.6: P 4.2: RC 4.2. Refers to F. J. Biele, J. L. Bogart, G. W. Fuller, J. R. McClintock, F. Mason, R. H. Randall.

## 1497

(7) CARLSON, ELNER WILFRED, 3133 Pleasant Ave., Minneapolis, Minn. (Age 23. Born Comfrey, Minn.) 1927 B. S. in C. E., Univ. of Minn. TT 4: P 4. Feb. to April 1927 drafting, Coll. of Agriculture, Univ. of Minnesota, on maps. June to Aug. 1927 in Testing Laboratory, State Highway Dept., preparing exhibit of materials, etc. Aug. 1927 to May 1928 Jun. Engr., Illinois State Highway Dept., acting as Inspector on culverts, Chainman, Rodman, Instrumentman, in Plans Dept. Office, on maps, laying grades. TT 0.6: SP 0.2: P 0.4. May 1928 to date Draftsman, Minnesota Highway Dept. in Right-of-Way and Plans Depts., on road plans, checking final estimates. TT 0.5: P 0.5. TT 5.1: SP 0.2: P 4.9. Refers to F. Bass, O. M. Leland, J. I. Parcel.

## 1498

(12) CARTER, IKE NEWTON, Univ. of Idaho, Moscow, Idaho. (Age 37. Born Bonham, Tex.) 1925 B. S., and 1928 M. S., in Civ. Eng., Univ. of Idaho. TT 4: P 4. Summer 1917 Computer, Efficiency Dept., Houston (Tex.) Elec. Co. Jan. to July 1918 Rodman, County Engr.'s Office, El Paso, Tex., drafting, computing, etc. TT 0.2: SP 0.2. July 1918 to Sept. 1920 Draftsman and Asst. Engr., U. S. Reclamation Service, El Paso, first few months Rodman at Berino, N. Mex., on drafting, estimates, computations, etc., then (six months) had general supervision of drafting, made preliminary locations, and minor changes in plans, for structures, handled transportation, made estimates, etc., and last 1½ years at Las Cruces, N. Mex. as Transltman, had charge of drafting force, assisted Field Engr. on preliminary locations for drainage and irrigation canals, assisted in re-designing and directing construction of an old irrigation project, etc. TT 2.1: SP 0.1: P 2: RC 1. Sept. 1921 to Sept. 1923 (while student) Student Instructor, Eng. Drafting, Vocational School, Univ. of Colorado. Sept. 1923 to Sept. 1925 (while student) Student Instructor, Sept. 1925 to Sept. 1927 Instructor, and Sept. 1927 to date Asst. Prof. of Civ. Eng., Coll. of Eng., Univ. of Idaho; Summer 1927 Analyst on investigation of Moscow (Idaho) Sewerage System. Summer 1928 Auditing Engr., North Side Canal Co., Jerome, Idaho. TT 3.3: P 3.3: RC 1.3. TT 9.6: SP 0.3: P 9.3: RC 2.3. Refers to J. L. Burkholder, I. C. Crawford, F. R. Dungan, M. R. Lewis, A. P. Ludberg.

## 1499

(5) CHARLES, SEWARD, 1324 Randolph St. N. W., Washington, D. C. (Age 46. Born Grayville, Ill.) 1900 to 1902 took special course in Bldg. Constr. and Civ. Eng. subjects, Columbian Univ. (George Washington Univ.) Dec. 1900 to July 1903 Engr. and Draftsman with W. H. Sincell, Contr., Washington, D. C., on structural engineering, drafting, field inspection, surveying and estimating. TT 1.3: SP 1.3: D 1. July 1903 to July 1904 Structural Engr. with Geo. O. Totten, designing steel building construction, field inspection and superintendence. TT 1: P 1: RC 1: D 1. July to Sept. 1904 Jun. Draftsman, and Sept. 1912 to July 1922 and June 1925 to Sept. 1926 Structural Engr., Office of Superv. Archt., Treasury Dept., Washington, D. C., designing steel and reinforced concrete post-offices, court- and custom-houses, office buildings, power plants, hospitals, etc. TT 11.2: SP 0.2: P 11: RC 11: D 11. Oct. to Dec. 1904 Asst. Engr., Philadelphia (Pa.) Rapid Transit Co., in charge of construction, superintending foundations, concrete work and steel and reinforced concrete construction. TT 0.3: P 0.3: RC 0.3. Jan. 1905 to May 1910 Structural Engr., until July 1905 with Ballinger & Perrott, Philadelphia, designing steel and reinforced concrete mill buildings, then with Office of Supt., U. S. Capitol, designing steel and reinforced concrete building construction for House and Senate office buildings, subways connecting

them with Capitol, checking design for Capitol power plant and superintending construction (cost \$10 000 000). TT 5.3: P 5.3: RC 5.3: D 5.3. May 1910 to Sept. 1912 and July 1922 to Jan. 1924 Structural Engr. with J. H. de Sibour, Archt., Washington, D. C., designing and superintending steel and reinforced concrete theatres, office buildings, hotels, apartment houses and fireproof residences. TT 3.8: P 3.8: RC 3.8: D 3.8. Jan. 1924 to June 1925 Structural Engr., until March 1924 with Bureau of Public Markets, New York City, designing steel and reinforced concrete cold-storage plants, storage buildings, markets, power houses, viaducts, retaining walls and foundations (\$7 000 000), then with U. S. Veterans Bureau, designing steel and reinforced concrete hospitals, power houses, retaining walls, recreation and mess halls, etc. TT 1.5: P 1.5: RC 1.5: D 1.5. Sept. 1926 to date Appraisal Engr., Bureau of Internal Revenue, Income Tax Unit, appraising buildings and equipment and manufacturing plants and equipment. TT 2.2: P 2.2: RC 2.2. TT 26.5: SP 1.5: P 25: RC 25: D 25.5. Refers to W. P. Darwin, F. Furlow, B. J. Mansfield, C. B. Rafter, M. S. Rich, E. C. Ruebsam, W. S. Tandrow.

## 1500

(14) COBB, WILLIAM CLAIR, 428 Custom House, St. Louis, Mo. (Age 28. Born Anderson, S. C.) 1917 to 1920 student, Clemson Agricultural and Mechanical Coll. of South Carolina. TT 1.5: P 1.5. June to Aug. 1920 and Sept. 1922 to June 1925 with U. S. Engr. Dept., Wilson Dam, Ala., as Instrumentman on layout and inspection of layout, and after Sept. 1922 Surveyor and Jun. Engr., 1 year acting as Chf. of layout party then Engr. in charge of layout and inspection on spillway and lock. TT 3: SP 0.2: P 2.8. Sept. 1920 to Sept. 1922 Chf. of Party, also Office Engr., with R. E. Meade, Constr. Engr., Florence, Ala., on highway location, subdivision planning, city surveying, in charge of making profiles, plans, estimates and specifications. TT 2: P 2: RC 1. June 1925 to May 1926 Jun. Engr., U. S. Lake Survey, Detroit, Mich., in charge of topographic and hydrographic surveys, St. Lawrence River, also making preliminary designs and estimates for locks, dams and levees for St. Lawrence Deep Waterway Report. TT 0.9: P 0.9: RC 0.6: D 0.3. May 1926 to date Jun. Engr. and Asst. Engr., U. S. Engr. Dist., St. Louis, Mo., 2 seasons in responsible charge of construction work in field, remainder of time on hydraulic studies, preliminary designs and estimates for locks and dams, also in general charge of levees in Dist. TT 2.5: P 2.5: RC 1: D 0.5. TT 9.9: SP 0.2: P 9.7: RC 2.6: D 0.8. Refers to E. C. Constance, J. C. Gotwals, R. B. McWhorter, W. M. Penniman, G. F. Whittemore.

## 1501

(10) COVERT, GEORGE SPOFFORD, Jr., Box 155, Jackson, Miss. (Age 30. Born Meridian, Miss.) 1922 B. S. of C. E., Miss. A. & M. Coll. TT 4: P 4. June 1922 to Feb. 1923 Draftsman with Gannett, Seelye & Fleming, Inc., of Memphis, Tenn., also assisted in valuation of Arkansas Power & Light Co.'s holdings in Little Rock, Ark. TT 0.3: SP 0.3. Feb. 1923 to June 1925 Rodman, Yazoo & Mississippi Valley R. R., on maintenance, inspection, etc. TT 1.1: SP 1.1. June to Dec. 1925 Instrumentman, Illinois Central R. R., New Orleans (La.) Terminal Div., on maintenance, inspection, auditing, etc. TT 0.5: P 0.5. Dec. 1925 to date Associate Engr. with W. B. Montgomery and Associates, Cons. Engrs., Jackson, Miss., 1 year on subdivisions and road construction, remainder of time Res. Engr. on street paving, Brookhaven, Miss.; since Dec. 1926 in charge of \$465 000 program. TT 3: P 3: RC 3. TT 8.9: SP 1.4: P 7.5: RC 3. Refers to E. Abbott, Jr., W. W. Boone, W. H. Corddry, G. G. Ehrenborg, D. M. Forester, T. G. Gladney, D. M. McCain, H. W. Nugent.

## 1502

(5) CRANDALL, HOWARD LAWRENCE, 516 North Charles St., Baltimore, Md. (Age 29. Born Baltimore, Md.) Studied Theory of Structures, including railway bridge and reinforced concrete design, at Johns Hopkins Univ. (earned full credits.) Aug. 1917 to Dec. 1922 Detailer and Designer, structural steel, Chesapeake Iron Works, Baltimore, Md., mill and loft buildings and bridges. TT 3.6: SP 1.6: P 2: RC 1.5: D 1.5. Dec. 1922 to date Structural Engr. for Herman F. Doeleman, Cons. Engr., Baltimore, designing and detailing structural steel, reinforced concrete and timber construction, office and loft buildings, schools, churches, etc. TT 5.4: SP 0.6: P 4.8: RC 4.8: D 4. TT 9: SP 2.2: P 6.8: RC 6.8: D 5.5. Refers to C. R. Burdette, P. G. Crout, H. F. Doeleman, W. C. Schnabel, O. H. Schroedl, J. T. Thompson.

## 1503

(15) DAVIDSON, ALFRED HARRY, Jr., City Engr., Del Rio, Tex. (Age 21. Born Chickasha, Okla.) 1928 B. S. in C. E. Agri. and Mech. Coll. of Tex. TT 4: P 4. June to July 1926 Rodman for City of Ft. Worth, street work, grades, cross-sections. July to Sept. 1926 Chf. of Party, Gulf Production Co., planetable and topographic work. June 1923 to date City Engr., Del Rio, Tex. TT 0.3: SP 0.2: P 0.1: RC 0.1: D 0.1. TT 4.3: SP 0.2: P 4.1: RC 0.1: D 0.1. Refers to J. T. L. McNew, T. A. Munson, J. J. Richey, C. E. Sandstedt.

## 1804

(7) **DONOHUE, JERRY**, 502 Ontario St., Sheboygan, Wis. (Age 43. Born Milwaukee, Wis.) 1907 B. S. C. E., Univ. of Wis. TT 4: P 4. July to Oct. 1907 Engr. Asst., Iron Mines Div., and Oct. 1907 to Dec. 1908 Div. Engr., in charge of 8 iron mines and 2 quarries, including railroad construction and power house layout, Tennessee Coal, Iron & R. R. Co. TT 1.4: SP 0.1: P 1.3: RC 1.3: D 1.3. Dec. 1908 to Jan. 1910 on engineering and surveying in Sheboygan, Wis. TT 1: P 1: RC 1: D 1. Jan. 1910 to Jan. 1913 member of firm, Donohue & Sinz, Cons. Engrs., municipal engineering in Sheboygan, Wis. TT 3: P 3: RC 3: D 3. Jan. 1913 to date consulting practice, since Jan. 1921 as Jerry Donohue Eng. Co., Inc., design of pavements, water-works, sewers, sewage disposal, drainage works, concrete foundations, some city and village planning, subdivision; work included development of Kohler, Wis. TT 15.9: P 15.9: RC 15.9: D 15.9. TT 21.3: SP 0.1: P 21.2: RC 21.2: D 21.2. Refers to T. C. Hutton, W. L. Hempelmann, D. W. Mead, C. V. Seastone, H. W. Skidmore, F. E. Turneure.

## 1505

(10) **ELKINS, JAMES HILL**, 3900 Ave. A, Birmingham, Ala. (Age 35. Born Los Angeles, Cal.) 1910 to 1914 Rodman, Chainman, Instrumentman, etc., with Stone & Webster, Erie R. R. Co., Thompson-Starrett and others. TT 2: P 2. 1914-1916 Chf. of Party and Draftsman, New York Central R. R. Co., on track and building layouts. TT 3: P 3: RC 2: D 1. 1917-1918 First Lieut., Constr. Q. M. Corps, U. S. Army, on construction of cantonments and supply depots, also layouts. TT 2: P 2: RC 2. 1919 Draftsman, Engr.'s Office, Polk County, Des Moines, Iowa. TT 0.5: P 0.5: RC 0.5: D 0.5. 1919 to 1920 Res. Engr., Parks Eng. Co., Pine Bluff, Ark., on surveys, and design and construction of roads. TT 1: P 1: RC 1: D 0.5. 1921 Prin. Asst. Engr., Wyoming Highway Comm., on design of roads and bridges. TT 0.3: P 0.3: RC 0.3: D 0.3. 1922 Gen. Supt. and Chf. Engr., Badger Constr. Co., Manitowoc, Wis., on building construction. TT 1: P 1: RC 1. 1923-1926 Project Engr., State of Nebraska, on road and bridge construction. TT 4: P 4: RC 4: D 1. July 1926 to Oct. 1927 Gen. Mgr., Steel Constr. Co., Birmingham, Ala., subsidiary of Ingalls Iron Works Co., being Mgr. of Erection of latter company, supervising steel structures under construction. 1927 to date Owner and Gen. Mgr., Jas. H. Elkins Constr. Co., on construction of office buildings, theatres, industrial plants, etc. TT 2: P 2: RC 2. TT 15.3: SP 2: P 15.3: RC 12.3: D 3.3. Refers to R. L. Cochran, R. O. Green, C. R. Kapp, M. C. Noble, A. R. Peyton, W. N. Woodbury.

## 1506

(10) **FAIRCLOTH, JAMES MANNING**, University, Ala. (Age 25. Born Clinton, N. C.) 1923 B. S. in Civ. and Highway Eng., N. C. State Coll. TT 4: P 4. Summers 1922 and 1923 Rodman and Chainman, Sampson and Bladen County Road Comms. June 1924 to Jan. 1925 Rodman and Instrumentman, North Carolina Highway Comm. TT 0.3: SP 0.3. Nov. 1925 to Sept. 1926 and summer 1927 Instrumentman and Inspector, Gilbert C. White Co. TT 0.5: SP 0.5. Feb. to June 1927 office work, Carolina Power & Light Co. TT 0.1: SP 0.1. Sept. 1928 to date Instructor, Univ. of Alabama. TT 0.2: P 0.2. TT 5.1: SP 0.9: P 4.2. Refers to C. E. Boesch, G. J. Davis, Jr., C. L. Mann, H. Tucker, G. C. White.

## 1507

(1) **FOX, FREDERICK JAY**, 1881 Walton Ave., Bronx, N. Y. (Age 35. Born Boston, Mass.) Student, Cooper Union (1911-1912) and Columbia Univ. (1912-1913). TT 1: P 1. 1914 to 1917 with G. F. Pelham, Archt., New York City, as Draftsman, Designer, Specificationman, and after 1915 Chf. Draftsman designing plans, letting contracts, writing specifications, checking and designing steel plans, outside supervision, etc. TT 2.5: SP 0.5: P 2: RC 1.5: D 0.5. 1917 to 1919 with U. S. Constructing Quartermaster, Washington, D. C., at Carnegie on structural steel check up and various plants in connection with army base construction and signal towers in Brest, France. TT 2: P 2: RC 2. 1919 to 1923 Chf. Draftsman, until 1920 for Irving Margon then for Margon & Glasser, New York City, on specifications, estimating, steel design, outside supervision, letting contracts, etc. TT 5: P 5: RC 3.5: D 1.5. 1923 to 1924 Outside Supt. and Gen. Bldg. Surveyor, World Acceptance Corporation, Chf. Estimator. TT 1: P 1: RC 1. 1925 to 1927 Chf. Estimator, Steel Designer and Gen. Constr. man for Sam. Rossoff, Brooklyn, N. Y., Subway Engr. TT 2: P 2: D 1.5. 1927 to date Chf. Engr., Male Barracks, Welfare Island, New York City; at present constructing two six-story apartment houses in New York City (\$500,000 and \$300,000); also occasionally Engr. for Rosoff Bros. on subway and sewer work. TT 1.5: P 1.5. TT 15: SP 0.5: P 14.5: RC 8: D 3.5. Refers to A. Brociner, J. Feld, R. E. Moss, G. A. Noska, H. I. Oser.

## 1508

(12) **FRANKLAND, JAMES**, Box 4137, Portland, Ore. (Age 39. Born Seattle, Wash.) Sept. 1910 to June 1914 (3 years) student, Coll. of Civ. Eng., Univ. of Washington. TT 1.5: P 1.5. 1 year (same period) Surveyor with U. S. Forest Service and others. July 1908 to July 1910 Apprentice Draftsman and Inspector, Dept. of Public Utilities, Seattle, Wash., on construction, etc. TT 0.5: SP 0.5. July 1914 to June 1917 Surveyor and Draftsman, U. S. Forest Service, Portland, on topographic surveys, control work and maps. TT 3: P 3: RC 1. June 1917 to May 1919 Capt., Field Artillery, U. S. Army. June 1919 to Oct. 1922 Asst. Engr., Port of Tacoma, on survey and layout of dredging and dock construction. TT 3.3: P 3.3: RC 2. Nov. 1922 to Aug. 1923 Asst. Engr., Tacoma Smelter, on design and superintending construction of bulk ore unloading dock and sampling plant. TT 0.8: P 0.8: RC 0.8: D 0.8. Sept. 1923 to April 1924 Asst. Eng. Draftsman with Hedrick & Kremers, on design of reinforced concrete structures for river bridges. TT 0.7: P 0.7: D 0.7. May 1924 to date with U. S. Forest Service, in charge of surveying and mapping in Oregon and Washington, until July 1928 as Chf. of Maps and Surveys, and since then Asst. Dist. Engr. on road and water power construction and inspection. TT 4.5: P 4.5: RC 4.5: D 1. TT 14.3: SP 0.5: P 13.8: RC 8.3: D 2.5. Refers to P. H. Dater, V. Gongwer, C. J. Green, I. G. Hedrick, F. F. Henshaw, T. W. Norcross.

## 1509

(15) **GRACE, WILLIAM ROY**, P. O. Box 683, Holdenville, Okla. (Age 37. Born Lampassas, Tex.) 1909 to 1910 Chairman, Midland Valley R. R. Co. TT 0.3: SP 0.3. 1910 to 1913 and 1917 to 1919 with U. S. Army; after 1917 as First Lieut., 345th Field Artillery (Heavy); student, Army Eng. School (1 year) and School of Fire (1 year). TT 4: P 4. 1913 to 1917 County Engr. and County Surveyor, and 1919 to 1921 County Engr., Board of County Commrs., Haskell County, Okla. TT 6.1: P 6.1: RC 6.1: D 6.1. 1921 to 1924 County Engr., Board of County Commrs., Hughes County, Okla. TT 3: P 3: RC 3: D 3. 1924 to date County Engr., Board of County Commrs., Seminole and Hughes Counties; Res. Engr., State Highway Dept. TT 4.3: P 4.3: RC 4.3: D 4.3. TT 17.7: SP 0.3: P 17.4: RC 13.4: D 13.4. Refers to J. F. Frazier, F. Herrmann, D. H. Jones, R. V. Lindsey, G. G. Toler.

## 1510

(13) **GREEN, JOHN WESLEY**, 807 Sheldon Bldg., San Francisco, Cal. (Age 36. Born Jefferson City, Tenn.) 1916 B. S. in C. E., Ore. State Agri. Coll. TT 4: P 4. July to Nov. 1916 Topographic Aide, U. S. Geological Survey, acting as Recorder. TT 0.1: SP 0.1. Jan. to April 1917 Asst. Engr., M. of W., Pennsylvania Ry., Pittsburgh, Pa. acting as Draftsman and Instrumentman. TT 0.2: SP 0.2. April to Dec. 1917 Draftsman and Computer, Fargo Eng. Co., Jackson, Mich., on hydro-electric and steam power-plant design. TT 0.4: SP 0.4. Dec. 1917 to June 1918 Draftsman, until Jan. 1918 with Michigan Highway Dept., Lansing, Mich., on plans, then with C. L. Best Gas Tractor Co., Dayton, Ohio, on tractor design, and after March 1918 with Washington State Highway Dept., Olympia, Wash. on location. TT 0.3: SP 0.3. June to Dec. 1918 with U. S. Army. Dec. 1918 to April 1919 Plant Engr., New Cornelia Copper Co., Ajo, Ariz., in charge of plant layout, supervision of construction of mine-plant buildings, designing heavy machinery foundations, setting machinery, etc. TT 0.3: P 0.3: RC 0.3. May 1919 to May 1927 Asst. Bridge Engr., Washington State Highway Dept., Olympia, on designing, detailing and checking plans for concrete, steel and timber highway bridges, supervision of bridge construction, preliminary surveys of bridge sites and foundation investigations. TT 8: P 8: RC 8: D 8. May 1927 to date Associate Highway Bridge Engr., U. S. Bureau of Public Roads, San Francisco, Cal., designing, detailing, and checking plans for National Park and Forest Road bridges, checking plans for bridges on Federal Aid projects, field inspections on bridge construction. TT 1.5: P 1.5: RC 1.5: D 1.5. TT 14.8: SP 1: P 13.8: RC 9.8: D 9.5. Refers to C. E. Andrew, H. R. Angwin, F. W. Panhorst, R. Pearson, C. H. Purcell, R. B. Wright.

## 1511

(11) **GREGORY, ROBERT LLOYD**, 2035 Rangeview Drive, Glendale, Cal. (Age 36. Born Harlan, Ky.) 1914 B. C. E., Univ. of Ky. TT 4: P 4. June 1914 to Jan. 1915 Supt. of Bldg. Constr., F. F. Cawood Constr. Co., Harlan, Ky. TT 0.5: P 0.5: RC 0.5. Jan. 1915 to May 1917 and Sept. 1917 to May 1918 Jun. Civ. Engr., Bridge and Roadway and Track Depts., Interstate Commerce Comm., Southern Dist. on railway valuation, after Sept. 1917 in charge of computations of field party. TT 2.4: SP 0.7: P 1.7: RC 1.2. May to Sept. 1917 in training and 2d Lieut., Engrs., U. S. Army. TT 0.3: P 0.3: RC 0.1. May 1918 to July 1919 Asst. Engr. of Constr., J. G. White Eng. Corporation, New York City, in charge of layout and division of construction, power plants, sewers, paving, storm drains, dredging, buildings, etc. TT 1.2: P 1.2: RC 0.8. Aug. 1919 to Jan. 1922 Res. Engr., Colorado State Highway Dept., on location, design and construction. TT 2.4: P 2.4: RC 2: D 0.8. Jan. to Sept. 1922 Bldr. and Contr. on residences, Denver, Colo. TT 0.7: P 0.7: RC 0.7. Sept. 1922

to Jan. 1924 Constr. Engr., Western Appraisal Co., Denver, in charge of Constr. Dept., making industrial appraisals. TT 1.2: P 1.2: RC 1.2: Jan. to July 1924 Designer and Promotor of system of home-building. TT 0.6: P 0.6: RC 0.6: D 0.3: July to Oct. 1924 Engr. in Chg., S. R. DeBoer Co., on construction of concrete paving. TT 0.3: P 0.3: RC 0.3: Oct. 1924 to Jan. 1925 Engr. in Chg., Welland Eng. Co., Pueblo, Colo., in charge of construction of water-works system for Aztec, N. Mex. TT 0.2: P 0.2: RC 0.2: Feb. 1925 to date with Los Angeles County Surveyor, one year as Surveyor in charge of party on layout of storm drain and sanitary sewer systems, then with Storm Drain Div., until June 1928 as Designer, on preliminary investigations, reports, estimates, final designs of drainage systems, and since June 1928 Chf. Inspector in charge of construction of storm drains. TT 3.8: P 3.8: RC 3.8: D 2.3: TT 17.6: SP 0.7: P 16.9: RC 11.4: D 3.4: Refers to C. E. Arnold, F. Bates, N. Bostwick, J. E. Byers, F. F. Friend, H. C. Ives, A. Jones, C. H. Reeves, J. E. Rockhold.

## 1512

(2) GRIFFIN, WRAY WALLACE, 76 Dover St., Worcester, Mass. (Age 30. Born Fair Haven, Vt.) 1923 B. S., Eng. Dept., Coll. of Forestry, Syracuse Univ. TT 4: P 4: April 1917 to April 1919 Inst. Sgt., 102d Machine Gun Battalion, 26th Div., A. E. F., on surveys for machine gun and rifle ranges and surveys for and plotting of battle maps. TT 1.1: SP 0.5: P 0.6: RC 0.3: Summer 1922 Rodman, and summer 1923 Instrumentman, Humbird Lumber Co., Sandpoint, Idaho. TT 0.2: SP 0.2: Sept. to Nov. 1923 Chf. of Party, Spring Creek (W. Va.) Lumber Co., in charge of railroad location and grade construction. TT 0.2: P 0.2: RC 0.2: Dec. 1923 to Sept. 1924 Chf. of Party, St. Maurice Paper Co., Ltd., and St. Lawrence Paper Mills, Three Rivers, Que., Canada, on surveys. TT 0.6: P 0.6: RC 0.6: Dec. 1924 to Oct. 1926 with Wayagamack Pulp & Paper Co., Ltd., Three Rivers, first as Chf. of Party, then Res. Engr. on Flamand Vermillion development, in charge of field office and surveys for and design and construction of roads, dams, flumes, bridges and buildings. TT 1.8: P 1.8: RC 1: D 0.8: Nov. 1926 to June 1927 Jun. Asst. Engr., Grade 2, New York State Dept. of Public Works, on highway engineering, field and office, later in charge of surveys and design of small buildings and pumping station, Long Island St. Park Comm., Babylon, N. Y. TT 0.4: P 0.4: RC 0.2: D 0.2: Sept. 1927 to date Chf. of Party on construction and hydrographic surveys on Bellows Falls Hydro Development, later Asst. Engr., Transmission Dept. New England Power Constr. Co., Boston, Mass. TT 1.1: SP 0.1: P 1: RC 1: TT 9.4: SP 0.8: P 8.6: RC 3.3: D 1: Refers to C. R. Bliss, A. C. Eaton, C. J. Gooch, L. Gurney, R. F. Olds.

## 1513

(7) HALL, QUINCY ALLEN, 356 Cedar St., St. Paul, Minn. (Age 46. Born Milford, Ill.) 1907 B. S. in M. E., Univ. of Ill. TT 4: P 4: 1907 to 1913 (except 19 months in 1908 and 1909 Capt. 34th and 471st Engrs., U. S. Army) with Mech. Div., Isthmian Canal Comm. Canal Zone, Panama, until 1908 as Mech. Draftsman, then Testing Engr. in charge of tests on material and equipment. TT 5.7: SP 0.7: P 5: RC 5: 1914 to date with Bureau of Inspection and Tests, Quincy, A. Hall Laboratory, testing cement, steel, concrete, etc. TT 14: P 14: RC 14: TT 23.7: SP 0.7: P 23: RC 19: Refers to R. Budd, W. N. Carey, P. N. Coates, J. R. Johnston, W. E. King, H. D. Lovering, D. I. Oles.

## 1514

(11) HARRISON, KENNETH JOSEPH, 5042 Vincent Ave., Eagle Rock, Cal. (Age 33. Born Waco, Tex.) 1918 B. S. in C. E., Throop Coll. Tech. (Cal. Inst. Tech.) TT 4: P 4: Summers 1916 and 1917 Draftsman, Pacific Telephone & Telegraph Co., Los Angeles, Cal. Jan. to Dec. 1918 with Corps of Engrs., U. S. Army, first at Engineer Officers' Training School, Camp Lee, Va., July 1918 commissioned 2d Lieut., being Instructor, Engineer Officers School, Camp A. A. Humphreys, Va. (July to Oct. 1918) and with 216th U. S. Engrs., 16th Div. (after Oct. 1918): TT 0.6: SP 0.2: P 0.4: March 1919 to Jan. 1925 with Southern California Edison Co. on Big Creek-San Joaquin River hydro-electric development, successively as Chairman, Levelman, Instrumentman and (after June 1920) Chf. of Party on surveys, also on layout and inspection of several construction units, including penstocks, riveted steel flow-line, addition to reinforced concrete power-house, three impulse wheels and generator sets in power houses Nos. 1 and 2 at Big Creek, tunnel work, mountain road and transmission lines, layout of camps with water supply and sewage disposal, etc. TT 5.2: SP 0.7: P 4.5: March 1925 to date with Los Angeles County Flood Control Dist. on Pacoima Dam (constant angle arch, 375 ft. high, to cost about \$2 500 000), until June 1925 as Field Draftsman, then Asst. Engr. on design and construction details (1 year) and in charge of layout and construction, and after Feb. 1927 Res. Engr. in charge of all work at the dam. TT 3.4: SP 0.2: P 3.2: RC 1.6: D 1: TT 13.2: SP 1.1: P 12.1: RC 1.6: D 1: Refers to A. F. Blight, R. C. Booth, H. W. Dennis, E. C. Eaton, F. A. Noetzli, W. A. Perkins, F. Thomas,

## 1515

(9) HARTIGAN, AUGUSTUS FISHER, 823 First Trust Bldg., Hammond, Ind. (Age 51. Born Bloomington, Ill.) 3 years (prior to Dec. 1899) student, Dartmouth Coll. TT 1.5: P 1.5. Two seasons Chairman and Rodman on railroad realignment, etc. April 1902 to 1906 Engr., Foreman and Supt., Hartigan Constr. Co., and (6 months) Asst. Res. Engr. and Supt. of Constr., Indiana Harbor R. R., Dune Park Div. TT 4: P 4: RC 4: D 0.5. 1906 to 1912 on grading and substructural excavations at large plants in Calumet region, drainage and yard work for Elgin, Joliet & Eastern Ry. and Indiana Harbor Belt R. R., at Gary, etc. TT 6: P 6: RC 6. 1912 to 1916 on channel change, Baltimore & Ohio R. R., Walkerton, Ind., grading, excavating, river-bank straightening, American Bridge Co., Gary, Ind., E. J. & E. yard work, etc. TT 4: P 4: RC 4. 1916 to 1920 on grading, excavating, substructural, material moving, some road work, etc., with Mark Mfg. Co. (Youngstown Sheet & Tube Co.), East Chicago, Ill., and American Sheet & Tin Plate Co., Gary. TT 4: P 4: RC 4: D 2. 1920 to 1924 on paving, Cook County, Ill., Illinois State Road, Route 15, large district sewer and two others, Hammond, Ind., heavy grading State road systems, open rock tunnel, with rock sewer in bottom, Ottawa, Ill., and large retaining wall, E. J. & E. Ry., Gary. TT 4: P 4: RC 2. 1925 on 3 miles of heavy grading, Illinois Central R. R. cut-off, Kentucky. TT 1: P 1: RC 1: D 0.6. 1926 to 1927 on grading, drainage, firewall construction, Roxana refinery, East Chicago, Ind., substructural work. TT 2: P 2: RC 2. 1927 on sewer system, A. S. & T. P. Co., Gary, involving  $2\frac{1}{2}$  miles of 89-in. by 84-in. sewer and about same 27 ft. down, crossing live sloughs, under 29 live tracks, and outfall into river channel. TT 1: P 1: RC 1: D 0.6. 1928 on Turner Meyne Subdivision, Hammond, grading, sewer, paving, converting slough and bog to ground capable of sustaining pavements, park, etc. and (4 months), at U. S. Gypsum Plant, East Chicago, on grading, excavating and sewer system, since March 1928 Pres., A. F. Hartigan Co. TT 1: P 1: RC 1: D 0.6. TT 28.1: P 28.1: RC 26.6: D 2.3. Refers to J. E. Cahill, H. C. McClure, A. P. Melton, T. F. Quilty, R. W. Reed, R. Seely.

## 1516

(9) HATCH, BERNARD FRANKLIN, 779 East Hudson St., Columbus, Ohio. (Age 31. Born Medina, Ohio.) 1920 B. C. E., Ohio State Univ. TT 4: P 4. June 1920 to Sept. 1923 Asst. Engr. with Morris Knowles, Inc., Engrs., Pittsburgh, Pa., on inspection of construction, field investigations, reports and design of water-supply and sewage-disposal structures. TT 2.2: SP 1: P 1.2: RC 0.5: D 0.5. Sept. 1923 to date Asst. Engr., Ohio Dept. of Health, Columbus, Ohio, on field investigations of, and review of plans for water-supply, sewage-disposal and industrial-wastes projects, and special investigations and reports on stream pollution. TT 4.6: SP 0.5: P 4.1: RC 3.1: D 1. TT 10.8: SP 1.6: P 9.3: RC 3.6: D 1.5. Refers to E. G. Bradbury, W. H. Dittoe, R. F. MacDowell, M. G. Mansfield, C. T. Morris, F. D. Stewart, F. H. Waring.

## 1517

(11) JAMESON, JOHN ALEXANDER, Jr., Box 241, Bingham, Me. (Age 25. Born Chicago, Ill.) 1925 A. B., Williams Coll. 1928 B. S., Mass. Inst. Tech. TT 4: P 4. Refers to J. B. Babcock, 3d, H. K. Barrows, C. M. Spofford, W. A. Starrett, C. H. Sutherland.

## 1518

(1) JOHNSON, WESTON MACLEOD, Puerto Castilla, Honduras. (Age 23. Born Sapporo, Japan.) 1928 B. S. in C. E., Univ. of Southern Cal. TT 4: P 4. June 1928 to date Jun. Engr., Truxillo R. R. Co., on irrigation project, locating laterals, sublaterals and drains, TT 0.2: SP 0.2. TT 4.2: SP 0.2: P 4. Refers to R. M. Fox, J. W. Ludlow.

## 1519

(1) JONES, EDMUND HAZEN, Comision Fiscal Permanente, Casilla de Correo 700, La Paz, Bolivia. (Age 57. Born Keokuk, Iowa.) 1893 to 1912 with U. S. Engr. Dept., until 1899 as Rodman, Chairman, Topographer, Receiver of Material and Inspector on construction of dam and shore protection, Mississippi River Improvement, Rock Island Dist., then (7 years) at Porto Rico as Asst. to Engr.-in-Chg., Insular Public Works, being Inspector on highway construction, culverts and bridges, later in main office in charge of engineering accounts, and after 1906 Chf. Clerk, New York City, on work involving general engineering knowledge of river and harbor works, accounting, contracts for dredging and rock removal, East River and Hell Gate, Hudson and Harlem Rivers and harbors on Long Island. TT 13: SP 6: P 7: RC 7. 1912 to 1914 with Pearson Eng. Corporation, Barcelona, Spain, on hydro-electric project, had charge of construction office and general inspection of work. TT 2: P 2: RC 2. 1914 to 1916 at Vladivostok, Siberia, in charge of receipt and forwarding of war materials, such as locomotives, railroad cars, accessories and rails, and auto trucks, from United States. TT 2: P 2: RC 2. 1916 to 1918 in European Russia studying conditions for purchase of mining and engineering equipment, then became Representative, Vice-Pres. and Treas. of large Russian Eng. Corporation, New York City, and arranged purchase and shipment of coal

mining machinery, conveyors, gold-dredging outfits, etc. TT 2: P 2: RC 2. 1919 to 1922 in New York City buying mining and other material for use in Northern Manchuria and Siberia. TT 3: P 3: RC 3. 1922 to 1926 Member, American Finance Mission to Persia at Tabriz, near Russian Frontier, on finance and tax work, and rehabilitated railroad and rebuilt electric plant, assisted in construction of roads, etc. TT 4: P 4: RC 4. 1926 to 1928 Asst. Mgr. of Constr., Ulen & Co., Barranquilla, Colombia, on jetty construction project at mouth of Magdalena River. Aug. 1928 to date named by Equitable Trust Co., Spencer-Trask of New York and Stifel-Nicalaus of St. Louis as Member, Permanent Fiscal Comm. in Bolivia, for protection of banking group in connection with a loan. TT 1.6: P 1.6: RC 1.6. TT 27.6: SP 6: P 21.6: RC 21.6. Refers to J. M. Belknap, J. W. F. Bennett, R. D. Black, W. M. Black, L. N. Farnum, L. M. Gray, R. W. Hebard, I. W. McConnell, M. Meigs, L. J. Proctor, C. J. Renner, G. W. Sackett, J. A. Sargent, J. Stewart.

## 1520

(1) KASHKIN, CONSTANTIN NICOLAEVITCH, Demidoff lodg. 35, Leningrad, 1, U. S. S. R. (Age 62. Born Moscow, U. S. S. R.) 1888 Candidat of Mathematical Sciences; Univ. of Moscow. 1891 Engr. of Ways of Communication Inst. of Engrs. of Ways of Communication at Leningrad. 1892 to 1894 Engr. on construction Kursk-Voronezh Ry. (Society of Moscow-Kiev-Voronezh Ry.) TT 3.2: P 3.2. 1894 to 1899 Chf. of Constr., 14th Sec., Middle-Siberian Ry. TT 4.5: P 4.5: RC 3.5. 1901 to 1907 Chf. of Constr., 2d Sec., South Dist., Tashkent R. R. TT 5.6: P 5.6: RC 5.6. 1908 to 1911 Chf. of Improvement, 4th Sec., Siberian R. R. TT 3: P 3: RC 3. 1911 to 1912 Chf. Engr., final location, Altoll R. R. TT 1.5: P 1.5. 1913 to 1918 Chf. Engr., Branch Lines Co. TT 5: P 5: D 5. 1918 to 1920 Member, Technical Council and Chf., Committee of State Works. TT 2: P 2: RC 2. 1920 to 1921 Prof., High Polytechnical School, Saratoff. TT 2: P 2. 1924 to date Prof., Inst. of Engrs. of Ways and Communications; also, since 1926 Chf. Engr., Economical Researches in North of U. S. S. R., and since 1927 Chf. Engr. on location of railroads, Moscow Donbass and Krivoy Rog. Donbass. TT 4: P 4: D 4. TT 30.8: P 30.8: RC 14.1: D 10.5. Refers to J. G. Alexandroff, E. B. Blizniak, S. de Karelscha, D. P. Krynine, V. E. Timonoff.

## 1521

(2) KEENAN, THOMAS HENRY, 25 Henshaw St., Brighton, Mass. (Age 43. Born Boston, Mass.) March 1908 to Oct. 1910 Rodman, Charles River Basin Comm., lines and grades, and Inspector on concrete coping of piles on embankment wall, Sec. 40, Boston Marginal Conduits. TT 1.3: SP 1.3. March to Sept. 1926 Inspector, Boston, Revere Beach & Lynn R. R., in charge of design and construction of 6-in. reinforced concrete lining above Springing Line in Twin tunnels under Maverick St., East Boston. TT 0.5: P 0.5: RC 0.5. May to Dec. 1927 Inspector, Boston Water Dept., in charge of construction of concrete tunnel, under Boston & Albany and New York, New Haven & Hartford tracks at Arlington St. TT 0.6: P 0.6: RC 0.6. Jan. 1905 to date (except March 1908 to Oct. 1910, March to Sept. 1926 and May to Dec. 1927) with Boston Transit Comm., until April 1912 as Rodman, inspecting concrete mixing, construction of platforms and station finish, Park St. (under station), Sec. 2, Beacon Hill tunnel, etc.; then Inspector in charge of night work, grouting and repairs, Secs. B and C, East Boston Tunnel and assisting on cement tests (April 1912 to June 1918), on changes in subway stations and construction of sections of a tunnel, sewers, reinforcing and placing of concrete, construction of freight sidings and walls, concrete piers for a bridge, changes in a pipe crossing, etc.; in charge of night shift on construction of Maverick Station, East Boston Tunnel alterations (Sept. 1921 to Feb. 1925), of construction of Harrison sub-power station, Sec. 2 (Oct. 1926 to April 1927) and Ashmont subpower station, and signal tower, Sec. 4, Dorchester Rapid Transit (Dec. 1927-May 1928), concrete foundations, brick and steel, etc. TT 16.1: SP 5: P 11.1: RC 11.1. TT 18.5: SP 6.3: P 12.2: RC 12.2. Refers to C. J. Carven, R. B. Davis, W. W. Davis, W. W. Lewis, D. M. Sullivan, T. F. Sullivan, P. B. Walker.

## 1522

(10) KERSHAW, ROYCE GIDEON, 1622 Barnett National Bank Bldg., Jacksonville, Fla. (Age 30. Born Renfro, Ala.) Graduated from T. M. I. 1 year student, Univ. of Virginia. Summers 1909 to 1919 with his father on construction as Waterboy, Rodman, Laborer, Fireman and Shovel Operator. June 1920 to July 1921 with Kershaw Min. Co., Birmingham and Carson Hill, Ala., until Dec. 1920 as Rodman, Instrumentman, Truck Driver, Miner and Timekeeper, then Shovel Operator, later Night Supt. on coal-stripping operation, in charge of reporting yardage moved, routing shovels, drainage and track layouts. TT 0.6: SP 0.6. July 1921 to Nov. 1922 Engr., Timekeeper and Accountant, Wade & Co., Highway Contrs., Bonifay, Fla., in charge of accounts, estimates, payrolls, etc., on work in North Carolina. TT 1.3: P 1.3. Nov. 1922 to April 1925 with C. G. Kershaw Contr. Co., as follows: Nov

1922 to Dec. 1923 Supt. of Constr. of tracks, grade revision, underpass and classification yards (\$225 000) for Lehigh Portland Cement Co., Birmingham, Ala.; Dec. 1923 to Sept. 1924 Supt. of gravel pit operation, Winfield, Ala., designed and built all tracks and layouts and operated plant; Sept. 1924 to April 1925 Supt. of Constr. of double track, Parkton to Rennert, N. C., and classification yard for Atlantic Coast Line Ry. designed equipment and track layouts for excavation, etc., and after Jan. 1925 of double track, Jacksonville to St. Augustine, Fla., for Florida East Coast Ry. Co. TT 2.6; P 2.6; RC 0.9; D 0.1. April to Dec. 1925 Sub-Contr. at St. Augustine, on trestles, culverts, pipe lines, small bridges, completed five jobs (about \$200 000). TT 0.7; P 0.7; RC 0.7. Dec. 1925 to date member of Royce Kershaw, Inc., Gen. Contrs., completed twenty-five construction jobs (names given in application), including bridges, foundations, pile driving, sea walls, etc. TT 3; P 3; RC 3. TT 8.3; SP 0.6; P 7.7; RC 4.6; D 0.1. Refers to B. L. Crenshaw, J. J. Gantt, M. B. Garriss, S. S. Jacobs, W. F. Lineberger, B. P. McWhorter, W. Willoughby.

## 1523

(11) KNOX, LLOYD BRYAN, 507 Porter St., Glendale, Cal. (Age 27. Born Des Moines, Iowa.) 1924 A. B., Univ. of Redlands. July 1924 to June 1925 Draftsman and Computer, Southern California Gas Co., on calculation and preparation of maps for gas line location and rights of way. TT 0.9; P 0.9. June 1925 to date Senior Civ. Eng. Draftsman, Southern California Edison Co., surveying calculations for rights of way, transmission line location, etc. TT 3.4; P 3.4. TT 4.3; P 4.3. Refers to W. L. Chadwick, H. W. Dennis, A. B. Pierce, C. L. Randolph, R. C. Rice, O. A. Wait.

## 1524

(7) LEVIN, LOUIS FRANK, 904 John St., Sault Ste. Marie, Mich. (Age 37. Born Sault Ste. Marie, Mich.) 1917 B. S. in Civ. Eng., Mich. Agri. Coll. TT 4; P 4. One vacation on inspection, and summer 1917 Instrumentman and Draftsman, for Michigan State Highway Dept. TT 0.1; SP 0.1. Sept. 1917 to Dec. 1918 with U. S. Army, first at Camp Custer, Mich., Jan.-March 1918 at Infantry Officers' Training Camp, commissioned 2d Lieut., Inf., Col. L. 18th Bn., Camp Lee, Va., conducted engineering classes. Jan. to Aug. 1919 Jun. Engr., Interstate Commerce Comm., Chattanooga, Tenn., land valuation. TT 0.3; SP 0.3. Aug. 1919 to March 1920 Bridge Designer, Iowa State Highway Dept., Ames, Iowa, design, checking and drafting. TT 0.6; SP 0.1; P 0.5; RC 0.5; D 0.5. March 1920 to March 1921 County Highway Engr., Allegan County, Mich., originated work of office, opened records, etc. TT 1; P 1; RC 1; D 1. March 1921 to date County Highway Engr., Chippewa County, Mich. TT 7.5; P 7.5; RC 7.5; D 7.5. TT 13.5; SP 0.5; P 13; RC 9; D 9. Refers to I. DeYoung, G. C. Dillman, E. F. Kelley, C. A. Mellick, L. C. Sabin, L. C. Smith.

## 1525

(1) MACKENZIE, ALAN FRANCIS STUART, 30 East Thirty-Seventh St., New York City, (Age 28. Born Pittsburgh, Pa.) Student in Civ. Eng., Virginia Polytechnic Inst. (Jan. 1919 to Jan. 1920) and Univ. of Virginia (Sept. 1922 to June 1924). TT 1.5; P 1.5. July to Oct. 1922 Timekeeper, Chesapeake & Ohio R. R. Shops. June to July 1924 Rodman with Frank Armistead, C. E., Norfolk, Va. TT 0.1; SP 0.1. July 1924 to April 1925 Asst. Supt. with Albert Kahn, Inc., inspection and surveys on construction, 1 month in charge. TT 0.4; SP 0.3; P 0.1. Dec. 1925 to Aug. 1926 Engr., Carl G. Fisher Properties, Miami Beach, Fla., on real-estate subdivision, bulkheads, docks, roads, test borings. TT 0.5; SP 0.2; P 0.3. April to May 1927 Labor Foreman, The Severance Co., Chicago, Ill., on reconstruction and repairs to White House, Washington, D. C. TT 0.1; P 0.1. May to Aug. 1927 Engr., Wilson & Co., Norfolk, in charge of storm and sanitary sewer systems of an industrial plant. TT 0.3; P 0.3. April to Dec. 1925 and Feb. 1928 to date with U. S. Army Engr. Corps, first as Party Chf., Dist. of Washington, on construction layout, cross-sectioning, mapping and since Feb. 1928 Surveyman, 1st Dist., New York, on soundings and topography. TT 1; SP 0.3; P 0.7. TT 4; SP 1; P 3. Refers to J. E. Curtis, J. P. Duffey, T. B. Kiener, P. O. Macqueen, F. O. X. McLoughlin.

## 1526

(7) McCORMICK, FRANK JAMES, Agricultural Eng. Bldg., Iowa State Coll., Ames, Iowa, (Age 21. Born Danville, Iowa.) 1927 B. S. in Arch. Eng., Iowa State Coll. TT 4; P 4. April to Sept. 1928 Draftsman, Kalman Steel Co., Chicago, Ill., detail work on reinforced concrete structures. TT 0.2; SP 0.2. Sept. 1928 to date Asst., Agricultural Eng. Experiment Station, Iowa State Coll., specializing on design and construction of rural structures. TT 0.1; SP 0.1. TT 4.3; SP 0.3; P 4. Refers to Q. C. Ayres, R. A. Caughey, E. E. Ebling, A. H. Fuller, C. C. Smith.

## 1527

(8) McKINSTRY, ROSS WALDRON, Taft Rd., Hinadale, Ill. (Age 32. Born Galesburg, Ill.) Has passed state examinations for Structural Engr. 1918 C. E., Cornell Univ. TT 4.5; P 4. Jan. 1919 to Sept. 1922 with B. H. Prack, Engr., Pittsburgh, Pa., assisted on struc-

tural work (1½ years) and Archt.'s Supt. on out-of-town work. TT 2.7: SP 0.7: P 2: RC 0.5: D 0.5. Sept. 1922 to date with H. B. Barnard, Gen. Contr., Chicago, Ill., in charge of work, being responsible for procuring new work, letting contracts, directing work from office, etc.; work (average about \$700 000 annually) has included building of Chicago Theological Seminary (about \$1 000 000), First Congregational Church and annex, Evanston (about \$400 000), Ravenswood Masonic Temple (about \$300 000) and many others. TT 6: P 6: RC 6: TT 12.7: SP 0.7: P 12: RC 7.5: D 0.5. Refers to J. L. Fyfe, B. J. Kaiser, B. H. Prack, F. A. Randall, L. E. Ritter.

## 1528

(1) McWILLIAMS, JOHN IGNATIUS, 7705 Ninety-Fifth Ave., Ozone Park, N. Y. (Age 39. Born Brooklyn, N. Y.) 1912 to 1915 Second Lieut., 1915 to 1916 Second Lieut. and First Lieut., 1917 to 1922 Capt., and 1922 to date Major, Q. M. Corps, U. S. Army, engaged as follows: 1912 to 1915 drafting and estimating, New York Arsenal, and Asst. Supt. of Constr., State Camp, Peekskill, N. Y.; 1915 to 1916 Constr. Q. M. and Asst. on water supply and general construction at McAllen, Tex., Mexican Border Campaign; 1917 to 1918 on water supply, construction and layout work at Camp Wadsworth, S. C.; 1918 to 1919 Asst. Div. Q. M., 27th Div., on construction and supply, A. E. F., France and Belgium; 1919 to 1922 in charge of road and general construction, State Camp, Peekskill; since 1922 in charge of design, layout and construction, cavalry, infantry and field artillery camp, U. S. Govt. reservation, Pine Camp, Great Bend, N. Y., administration and mess buildings, kitchens, bath, pump and store houses, gun housing, septic tank, sewer, water supply, observation towers, bomb proofs, incinerator, forage sheds, concrete roads, aviation field, truck sheds, etc. TT 12: SP 3: P 9: RC 6: D 7. Refers to H. B. Brewster, W. W. Harts, C. H. Higginson, L. R. Lohr, R. S. Thomas.

## 1529

(3) MANTHAL, FREDERICK STEPHEN, 274 St. Lawrence Ave., Buffalo, N. Y. (Age 27. Born Port Jervis, N. Y.) 1927 C. E., Cornell Univ. TT 4: P 4. Refers to F. A. Barnes, H. N. Ogden.

## 1530

(11) MATTHEWS, HARRY GRANT, 2519 North Main St., Santa Ana, Cal. (Age 38. Born Santa Ana, Cal.) 1911 to 1912 and 1914 to 1917 student, Coll. of Civ. Eng., Cornell Univ. TT 2: P 2. 1912 to 1914 Instrumentman and Chf. of Party on river, harbor and inland waterways, U. S. Engr. Office, Norfolk, Va. TT 1.7: SP 0.2: P 1.5: RC 1.5. 1916 to 1917 Asst. Res. Engr., City of Woodlawn, Pa., for Jones & Laughlin Steel Co. TT 0.7: P 0.7: RC 0.7. 1917 to 1918 2d Lieut., F. A., U. S. Army. TT 0.9: SP 0.9. 1918 to 1919 in private practice, Texas Oil Fields. TT 1: P 1: RC 1. 1919 to 1921 Deputy City Engr., Fullerton, Cal. TT 2.5: P 2.5: RC 2: D 0.5. 1921 to 1922 Santa Fe Rancho subdivision and irrigation. TT 1.2: P 1.2: RC 1.2. 1922 to 1926 in private practice with H. Clay Kellogg and W. W. Hoy of Santa Ana, Deputy City Engr., Brea, Cal., considerable irrigation. TT 3: P 3: RC 3. 1926 to date with Bureau of Power and Light, Los Angeles, Cal. TT 2.3: SP 0.8: P 1.5: D 1.5. TT 15.4: SP 1.9: P 13.5: RC 11: D 0.5. Refers to A. R. Arledge, E. A. Bayley, W. W. Hoy, L. E. Lyon, N. H. Neff, H. A. Van Norman.

## 1531

(15) MONTGOMERY, VOL HARDWICKE, Box 1328, Dallas, Tex. (Age 29. Born Sherman, Tex.) 1924 B. S. C. E., Agri. and Mech. Coll. of Tex. TT 4: P 4. July 1915 to Aug. 1917 Rodman and Instrumentman, until Jan. 1916 with Milliken Pipe Line Co., then with Sinclair Oil & Gas Co., Tulsa, Okla. TT 1.1: SP 1.1. March 1919 to May 1920 with Wentz & McCoskey Gasoline Co., Ponca City, Okla., as Instrumentman on surveys for gasoline plant layout and Foreman on construction and installation of machinery, field testing of casinghead gas. TT 0.6: SP 0.6. May 1920 to July 1921 Field Engr., Industrial Constr. Co., Tulsa, on supervision of layout work, surveying foundation work and erection of structural steel buildings. TT 1.1: SP 0.1: P 1: RC 1. June 1924 to date Structural Engr. for Austin Bros., Dallas, Tex., detailing and checking structural steel, in charge of designing reinforced concrete and structural steel. TT 4.4: P 4.4: RC 3: D 3. TT 11.2: SP 1.8: P 9.4: RC 4: D 3. Refers to E. H. Cornelius, G. W. Gill, J. W. Jones, J. H. Knox, J. T. L. McNew, J. J. Richey.

## 1532

(1) MUESER, WILLIAM HENRY, 342 Madison Ave., New York City. (Age 28. Born New York City.) 1922 B. S., Mass. Inst. Tech. TT 4: P 4. Summer 1921 Draftsman, Concrete Steel Eng. Co., on reinforced concrete bridges. Sept. 1922 to July 1923 post-graduate student in structures, mathematics and concrete design, Technische Hochschule, Berlin, Germany. Oct. 1923 to date with Moran, Maurice & Proctor, New York City, designing, estimating, Res. Engr., on foundations for buildings, etc., in charge of Subway Dept., acting as

Cons. Engr. for property owner adjacent to subway operations. TT 5.2: P 5.2: RC 2.8: D 3.3. TT 9.2: P 9.2: RC 2.8: D 3.3. Refers to C. B. Breed, H. M. Hale, E. H. Harder, H. B. Luther, D. E. Moran, W. Mueser, C. S. Proctor, C. M. Spofford, G. F. Swain.

1533

(12) MURROW, LACEY VAN BURIEN, 504 Maynard Bldg., Seattle, Wash. (Age 28. Born Greensboro, N. C.) 1926 B. S., Wash. State Coll. TT 4: P 4. Vacations Computer and Levelman on engineering work in Mexico and (1925) Compassman for timber cruiser. Oct. 1926 to March 1927 Inspector, Bridge Dept., State of Washington. TT 0.2: P 0.2. June 1919 to Sept. 1920 Chairman, June 1922 to Sept. 1924 Transitman and Inspector on paving and grading, June to Oct. 1926 Paving Inspector, and March 1927 to date Res. Engr. in charge of paving, grading, bridge and location work, all for Washington State Highway Dept. TT 5.8: SP 2: P 1.8: RC 1.8. TT 8: SP 2.2: P 5.8: RC 1.8. Refers to T. G. McCrory, F. W. Panhorst, H. E. Phelps, O. A. Piper, M. K. Snyder, O. L. Waller, R. H. Wilson.

1534

(7) NELSON, FREDERICK GRANT, 309 North Adams St., Mason City, Iowa. (Age 33. Born Elk, Cal.) 1924 B. S., Univ. of Cal. 1928 M. S. in San. Eng. and Bacteriology, Iowa State Coll. TT 4: P 4. July 1917 to Jan. 1919 Private, Corporal and Sergeant, 143d Field Artillery, U. S. Army, on instrument detail, laying guns, range finding, etc. TT 0.7: SP 0.7. May 1924 to March 1926 Asst. Engr., C. H. Loveland, Inc., Cons. Engrs., San Francisco, Cal., on evaluation of East Bay Water Co., Alameda County, Cal., some design and drafting, Big Bear Valley Water Co., Cal. TT 1.8: P 1.8: D 0.2. March to July 1926 Asst. Evaluation Engr., Great Western Power Co., San Francisco, Cal., being Chf. Asst. on evaluation of Caribou Project on Feather River, Cal. TT 0.4: P 0.4. July 1926 to May 1927 Asst. City Mgr., San Rafael, Cal., on design and supervision of street paving, sewers, etc., survey and preliminary design of outfall sewer; private work in laying out subdivisions. TT 0.8: P 0.8: RC 0.8: D 0.6. May 1927 to May 1928 Research Fellow, Eng. Experiment Station, Iowa State Coll., in charge of field work for study of treatment of packing-house wastes. TT 1: P 1: RC 1: D 0.4. May 1928 to date Engr., Currie Eng. Co., Webster City, Iowa, in charge of design and construction of plant for treatment of packing-house wastes, at Mason City, Iowa. TT 0.5: P 0.5: RC 0.5: D 0.2. TT 9.2: SP 0.7: P 8.5: RC 2.3: D 1.4. Refers to F. H. Austin, C. H. Currie, W. E. Galligan, C. G. Hyde, H. N. Jenks, A. Marston, C. I. Rhodes.

1535

(1) NORCOM, GEORGE DUSENBURY, 27 William St., New York City. (Age 36. Born Sea Isle City, N. J.) 1915 B. Sc., and 1923 S. E., Rutgers Coll. TT 4: P 4. 1916 to 1917 Chemist Asst., Bureau of Eng., New Jersey State Board of Health, on operation and control of water and sewage plants. TT 1.5: P 1.5. Sept. 1917 to Nov. 1918 First Lieut., and Nov. 1918 to July 1919 Capt., San. Corps, U. S. Army, 26th Engrs., Water Supply, in charge of water laboratory, Base Sec. 1, A. E. F. TT 1.9: P 1.9: RC 1.9. 1919 to 1921 Chemist in charge of water and food laboratory, Pittsburgh (Pa.) Testing Laboratory, on analytical work, supervision of water plants and investigations. TT 1.5: P 1.5. 1921 to 1926 San. Engr., Wilmington & Hanover County, N. C., in charge of water-purification plant, Advisor on mosquito extermination and sewage disposal. TT 5: P 5: RC 5. 1926 to 1928 Supt. of Filtration, City of Charlotte, N. C., in charge of water-purification plant, supervision of sewage disposal, consulting work. TT 2: P 2: RC 2. Feb. 1928 to date San. Engr., Federal Water Service Corporation, in charge of sanitation and quality of water. TT 0.8: P 0.8: RC 0.8. TT 16.7: P 16.7: RC 9.7. Refers to A. W. Cuddeback, J. B. Hawley, W. M. Platt, W. E. Vest, T. H. Wiggin, C. G. Wigley.

1536

(9) OAKLEY, KENNETH HARRINGTON, 9401 Lake Ave., Cleveland, Ohio. (Age 26. Born Toledo, Ohio.) 1924 B. S. in C. E., Univ. of Ill. TT 4: P 4. June 1922 to May 1923 Asst. Res. Engr., Ann Arbor R. R., on 5 miles of new track, including fill, culverts, bridges, rearrangement of yards and compensating old grades. TT 0.5: SP 0.5. Summer 1923 Chf. of Party, Welles-Brown Co., surveying and subdividing. June 1924 to July 1925 Jun. Engr., Illinois Div. of Highways, on highway construction and culvert design. TT 1: P 1. July 1925 to July 1926 Prof. Engr., surveying, subdivision, etc. TT 1: P 1: RC 1. July 1926 to May 1927 Contr., construction of concrete culverts, laying galvanized iron pipe and reinforced concrete culvert pipe, Charlotte County, Fla. TT 0.8: P 0.8: RC 0.8. June 1927 to Feb. 1928 Salesman, Peden Equipment Co., Contra. Equipment, Cleveland, Ohio. TT 0.4: SP 0.4. April 1928 to date Eng. Draftsman, Cleveland Union Terminals Co., on reinforced concrete design. TT 0.5: P 0.5: RC 0.2. TT 8.2: SP 0.9: P 7.3: RC 2. Refers to J. H. Anderson, E. F. Chandler, C. W. Creekbaum, H. Cross, F. L. Gorman, C. P. Marsh, L. C. Rogers, N. Welden.

1537

(8) **OHLSEN, WALTER CLAUSE**, 202 Union Station, Chicago, Ill. (Age 25. Born Davenport, Iowa.) 1928 B. S., Iowa State Coll. TT 4: P 4. July 1928 to date Bridge Squad Draftsman, Eng. Dept., Chicago, Milwaukee, St. Paul & Pacific R. R., estimating and designing. TT 0.3: P 0.3: D 0.3. TT 4.8: P 4.3: D 0.3. Refers to T. R. Agg, R. A. Caughey, W. L. Foster, A. H. Fuller, F. Kerekes, S. H. Smith.

1538

(15) **O'NEILL, JOHN HENRY**, 637 Lowerline St., New Orleans, La. (Age 41. Born Lowell, Mass.) 1910 B. S. Mass. Inst. Tech. TT 4: P 4. Sept. 1910 to Dec. 1912 Asst., Dept. of Public Health, American Museum of Natural History, planning and supervising preparation of exhibits on relation of environment to public health, particularly on water supplies and waste disposal. TT 1.1: SP 1.1. Jan. 1913 to date (except Nov. 1917 to Feb. 1919 Capt., San. Corps, U. S. Army, supervising camp sanitation) San. Engr., Louisiana State Board of Health, New Orleans, La., in charge of Bureau of San. Engr., supervising water-supply, sewerage, and waste-disposal systems, including review of plans for proposed systems; stream pollution, malaria control, etc. TT 15.8: P 15.8: RC 15.8. TT 20.9: SP 1.1: P 19.8: RC 15.8. Refers to E. F. Delery, G. W. Fuller, S. A. Greeley, W. B. Gregory, P. Hansen, F. A. Muth, A. M. Shaw.

1539

(8) **OSTLAND, RICHARD ERNEST**, 538 North Oak Ave., Brookfield, Ill. (Age 30. Born Chicago, Ill.) 1925 B. S. in C. E., Armour Inst. Tech. TT 4: P 4. June 1925 to March 1926 Rodman, Levelman, Transitman, Inspector and Chf. of Party, Chicago, North Shore & Milwaukee R. R., Highland Park, Ill., on construction. TT 0.7: SP 0.2: P 0.5: RC 0.2. Sept. 1927 to Sept. 1928 Designing Engr. (6 months) and Constr. Engr. on concrete pavement (6 months), Cook County Highway, Chicago, Ill. TT 1.1: P 1.1: RC 1.1. April 1920 to Sept. 1921 Timekeeper, Material Clerk and Rodman, March 1926 to Sept. 1927 Supt. of Constr. on gymnasium and mess hall project (\$250 000), and Sept. 1928 to date Engr. and Expeditor, on sludge bed, trestle and railroad work (\$2 000 000), all for Warner Constr. Co., Chicago. TT 2.4: SP 0.7: P 1.7: RC 1.7. TT 8.1: SP 0.9: P 7.2: RC 3: D 0.5. Refers to J. R. Griffith, J. F. Mangold, E. S. Nethercut, H. Penn, R. L. Stevens.

1540

(8) **PALMER, CYRUS EDMUND**, 1007 Douglas Ave., Urbana, Ill. (Age 40. Born Augusta, Ill.) 1912 B. S., Univ. of Ill. 1916 M. S., Pa. State Coll. TT 4: P 4. 1912 to 1914 Instructor in, and 1914 to 1916 Asst. Prof. of, Architectural Eng., Pennsylvania State Coll. Summer 1913 Draftsman and detailing with Webber & Kocher, Archts., State College, Pa. TT 4: P 4: RC 4. 1916 to 1917 Instructor in, 1917 to 1920 Associate in, 1920 to 1925 Asst. Prof. of, and 1925 to date Associate Prof. of, Architectural Eng., Univ. of Illinois. Summers in Suprv. Archt's Office, Univ. of Illinois, on structural design (1916) and on field work, campus development (1922); Supt. of reinforced concrete construction, Hunzinger Constr. Co., Quincy, Ill., on 6-story concrete frame department store (1917); on reinforced concrete design, A. Bentley & Sons Co., Archts and Engrs., Contrs., Toledo, Ohio (1918 and 1919); and on architectural engineering design with Graham, Anderson, Probst & White, Archts., Chicago, Ill. (1923). TT 12: P 12: RC 12: D 0.2. TT 20: P 20: RC 16: D 0.2. Refers to R. P. Barber, M. S. Ketchum, W. B. Livesay, W. A. Slater, A. N. Talbot, R. I. Webber, J. J. Woltmann.

1541

(1) **PAPE, HENRY JOSEPH CRAWFORD**, 10m5 Ulica Sienkiewieca, Warsaw, Poland. (Age 34. Born Great Grimsby, Lincolnshire, England.) 1922 Assoc. Civ. Engr., Univ. of Sheffield. 1910 to 1912 Jun. Engr., Bonna Reinforced Concrete Eng. Co., Paris, France, manufacture, testing and laying of 24-in. reinforced concrete pipe line, Craig Reservoir to Swansea, South Wales (5½ miles). TT 0.5: SP 0.5. 1912 to 1915 with Great Western Ry., mechanical training in locomotive shops, running sheds and main line work. TT 1.4: SP 1.4. 1915 to 1919 with Corps of Royal Engrs. (commissioned), 1 year course in civil and military engineering at School of Military Eng., Chatham; 6 months with 288th Quarry Co. R. E., stone quarrying and road construction, Marquise Rhinzent, France; 3 months on camp construction, Cape Town, South Africa; Engr. in charge of erection and running of buildings and plant for generating stations, refrigerating and pumping units at Basra, Awara and Bagdad, steam, petrol and semi-Diesel engines, Executive Engr. on road and railway construction on Persian lines of communications, surveys, selection of sites, light bridges, organization of native labor, purchase of materials and general administration. TT 4.4: SP 0.4: P 4: RC 2: D 0.5. 1919 to 1922 studying civil engineering and surveying under J. Husband, also on Staff of Water Engr., Sheffield Corporation, bridge design, plate and lattice girders, road and railway bridges, stressers, etc., steel and reinforced concrete structures and buildings, water-works, docks, railways, roads, tunnels, excavations, earthworks and heavy foundations. Sum-

mer course in surveying and setting out geology, hydraulics, estimating and quantities, surveys and designs for Wadsley Service Reservoir. TT 3: P 3: D 3. 1922 to 1923 Eng. Asst., Swansea Corporation, in charge of works (£100,000), earthworks, drainage, sewerage, culverts, tramway tracks, new roads, etc. TT 1: P 1: RC 1. 1923 to 1924 with Civ. Eng. Dept., Air Ministry, on surveys and contouring of aerodrome, roads and building design and steel structures. TT 1.4: P 1.4: D 1.4. 1924 to 1926 Civ. Eng. Designer with Rendel, Palmer & Tritton, Cons. Engrs., new works for Port of London Authority and Crown Agts. for the Colonies, design of dock walls, quay layout, concrete monoliths for entrance and dry dock, Tilbury, London; floating landing stage, etc., warehouses and buildings in steel and timber for Tilbury Docks and Takoradi Harbor. TT 1.6: P 1.6: RC 1.6: D 1.6. 1926 to 1927 with The Foundation Co., Ltd., London, in charge of drawing office staff, power station layout and design, factory buildings, circulating water systems, water tunnels, reinforced concrete structures, roads, heavy foundations, river and tidal works, general estimating and quantities. TT 2: P 2: RC 2: D 2. 1927 to Jan. 1928 Dist. Engr. to Greek Govt. under The Foundation Co., New York, in charge of Survey Div., Salonique Plain reclamation works, surveys, staking out, working plans, levelling, borings for bridge foundations, general district administration and accounts. TT 2: P 2: RC 2: D 2. Jan. 1928 to date Asphalt Road Expert to Municipality of Warsaw, Poland, under Asiatic Petroleum Co., London, on erection of Millars and Warren asphalt plant, control and organization of contractors, in charge of all operations on asphalt road construction. TT 1: P 1: RC 1: D 0.2. TT 16.3: SP 2.3: P 1.4: RC 7.5: D 7.7. Refers to J. Husband, F. Palmer, (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

1542

(7) PETERSON, FREDERICK GUST, Starbuck, Minn. (Age 24. Born Mankato, Minn.) 1927 B. S. in C. E., Univ. of Minn., TT 4: P 4. March 1927 to date Supt. of Constr., North Central Co., Contrs. in Sewer and Water-Works Construction. TT 1.6: P 1.6: RC 1.6. TT 5.6: P 5.6: RC 1.6. Refers to F. Bass, A. S. Cutler.

1543

(15) PRITCHETT, HENRY CARR, Box V, Capitol Station, Austin, Tex. (Age 32. Born San Marcos, Tex.) A. B., Southwestern Univ., Georgetown, Tex. 1926 B. S. in C. E., Univ. of Tex. TT 4: P 4. Jan. 1920 to June 1926 Hydrographer, Texas Board of Water Engrs., on adjudication of irrigation waters of lower Colorado River, Tex., measurement of stream flow at gauging stations, duty of water measurements on Medina Valley Irrigation project and similar work and seepage investigation in Rio Grande Valley, after Sept. 1922. (while student) in field in responsible charge of several stream-gauging stations (about 6 months) and (winters) computing stream-flow data, assisting Office Engr. in supervision of work, etc. TT 2.6: SP 0.1: P 2.5: RC 2. June to Sept. 1926 Asst. to County Surveyor, Hutchinson County, Tex., oil-field surveying. TT 0.2: P 0.2: RC 0.2. Sept. 1926 to date Jun. Engr., U. S. Geological Survey, 9 months in field in responsible charge of several stream-gauging stations in North Texas, with some construction, remainder of time in office on stream-flow computations and assisting Office Engr. TT 2.3: P 2.3: RC 2.3. TT 9.1: SP 0.1: P 9: RC 4.4. Refers to C. E. Ellsworth, O. A. Faris, R. G. Hemphill, C. E. McCashin, J. A. Norris, J. W. Pritchett.

1544

(1) ROBISON, CHARLES JOSEPH, 331 Madison Ave., New York City. (Age 40. Born Portland, Ore.) 1911 Ph. B., and 1913 C. E., Sheffield Sci. School, Yale Univ. TT 4: P 4. July-Aug. 1911 in charge of concrete construction for a dam at East Morris, Conn., for City of Waterbury; Unmack & Murdock, Gen. Contrs. TT 0.1: P 0.1: RC 0.1. Sept. 1911 to Sept. 1912 Res. Engr., Lucius Eng. Co. of Pittsburgh, on elevation and bridge work for Boston & Albany R. R. and other bridge work in West Virginia and Kentucky. TT 1: P 1: RC 1. July 1913 to date Chf. Engr. in charge of various plants of Goheen Companies, successively at Canton and Warren, Ohio, and (past 7 years) Newark, N. J.; designed and built a large plant; has had charge of design and maintenance of all property and design of new work, etc.; work has included considerable paint engineering work for industries and railroads, etc. TT 15.4: P 15.4: RC 15.4: D 15.4. TT 20.5: P 20.5: RC 16.5: D 15.4. Refers to K. Berle, D. Y. Dimon, W. H. Mohr, J. P. Sartz, A. S. Schoyen.

1545

(12) RUETTGERS, ARTHUR, Care Bureau of Reclamation, Ellensburg, Wash. (Age 39. Born Newark, N. J.) 1912 B. S. in C. E., Allegheny Coll. 1915 M. S. in C. E., Univ. of Mich. TT 4: P 4. July 1912 to Aug. 1913 Rodman, Baltimore & Ohio R. R., running transit and level, preparing estimates, etc. TT 0.6: SP 0.6. Sept. 1913 to June 1914 Instructor in Mathematics and Surveying, Allegheny Coll., Meadville, Pa. TT 0.8: P 0.8. Sept. 1915 to April 1923 with U. S. Reclamation Service until March 1918 as Rodman, Chainman, Surveyman and Jun. Engr., Sun River Project, Mont., on survey, inspection of

construction, etc., then Jun. Engr. and Asst. Engr., at Denver, Colo., being Asst. to Engr. of Cost and Property, on supervision of costkeeping methods, compilation of cost data, etc. TT 6.8: SP 0.8: P 6: RC 3. April 1923 to date with U. S. Bureau of Reclamation, until March 1926 as Asst. Engr., Riverton (Wyo.) Project, being Project Office Engr. on estimates, specifications, designs, reports, etc.; since April 1926 Asst. Engr. and Associate Engr., Yakima Project (Kittitas Div.), Wash., being Project Office Engr. in charge of drafting and designing, costkeeping and concrete tests and control, also Acting Constr. Engr. in absence of Constr. Engr. TT 5.6: P 5.6: RC 5.6: D 1.5. TT 17.8: SP 1.4: P 16.4: RC 8.6: D 1.5. Refers to H. D. Comstock, J. Munn, W. H. Nalder, J. L. Savage, R. F. Walter, C. P. Williams, W. R. Young.

1546

(7) SALMOND, IRVING MUNRO, Y. M. C. A., Highland Park, Detroit, Mich. (Age 27. Born Hyden, Ky.) 1928 B. S. in C. E., Univ. of Mich. TT 4: P 4. June 1928 to date Designer and Detailer, Detroit Edison Co. TT 0.3: SP 0.3. TT 4.3: SP 0.3: P 4. Refers to J. H. Cissel, L. M. Gram, C. T. Johnston, T. J. Mitchell, R. H. Sherlock.

1547

(1) SCHLEY, JULIAN LARCOMBE, Lieut.-Col., Corps of Engrs., U. S. Army, Balboa Heights, Canal Zone, Panama. (Age 48. Born Savannah, Ga.) 1903 U. S. Mil. Acad., West Point, N. Y. TT 4: P 4. Commissioned 2d Lieut., Corps of Engrs., U. S. Army. 1905 to 1907 post-graduate student in Eng., Engr. School, Washington Barracks, D. C. 1907 to date with Corps of Engrs., U. S. Army, engaged as follows: Aug. 1909 to Aug. 1912 Instructor, Dept. of Civ. and Mil. Eng., U. S. Military Acad., West Point; Oct. 1912 to March 1913 Asst. to Engr. Commr., District of Columbia, having supervision of Water, Sewer, Electrical and Bldg. Inspection Depts., etc.; March 1913 to Sept. 1916 Executive Officer, Public Utilities Comm., District of Columbia; Oct. 1916 to May 1917 in charge of U. S. Engr. Dist., New Orleans, La., on improvement and maintenance of rivers and harbors on coast of Louisiana, including mouths of Mississippi River; 1917 to 1919 principally on military work, with Engr. Troops, and 1919 to 1921 with War Dept. Claims Board, Washington, D. C.; 1921 to 1922 in charge of U. S. Engr. Dist., Nashville, Tenn., on improvement and maintenance of Cumberland River and Tennessee River below Wilson Dam; 1922 to 1924 Asst. Commandant, Engr. School, Ft. Humphreys, Va.; July 1924 to July 1928 in charge of U. S. Engr. Dist., Galveston, Tex., on improvements and maintenance of rivers and harbors of Texas, 1 year member of Board studying and recommending spillways below Red River to relieve floods of lower Mississippi River; at present Lt.-Col., Corps of Engrs., being Engr. of Maintenance, Panama Canal. TT 18.5: P 18.5: RC 12.5: D 5.4. TT 22.5: P 22.5: RC 12.5: D 5.4. Refers to J. F. Coleman, R. J. Cummins, J. H. Hanna, C. Harding, C. W. Kutz, C. A. McKenney, H. C. Mower.

1548

(6) SCHUTZ, MAX ADOLF, 90 Wick Oval, Youngstown, Ohio. (Age 38. Born Copenhagen, Denmark.) March 1913 to Sept. 1917 and May 1922 to July 1923 Structural Draftsman, Gen. Elec. Co., Pittsfield, Mass., drawing plans, designing, detailing and checking steel, reinforced concrete and timber factory buildings, etc. TT 4.2: SP 1.5: P 2.7: D 2.2. Dec. 1924 to May 1925 Structural Draftsman, Board of Transportation, New York City, checking subway construction drawings. TT 0.4: P 0.4. May 1925 to date Designing Engr., Youngstown (Ohio) Sheet & Tube Co., designing mill buildings, bridges, foundations, writings specifications, checking contractor's designs; in charge of designs and detailing. TT 3.5: P 3.5: RC 2: D 3.5. TT 8.1: SP 1.5: P 6.6: RC 2: D 5.7. Refers to L. T. Fawcett, H. Kornfeld, C. E. Lillestrand, M. M. Thrane, F. W. Townrow.

1549

(1) SHAW, EUGENE JAY, Care, R. W. Hebard & Co., Inc., Bucaramanga, Santander, Colombia. (Age 38. Born Ft. Bragg, Cal.) 1907 to 1912 (vacations) Stakeman, Chainman and Rodman, and 1912 to 1915 Concrete and Tunnel Inspector, Leveler and Transitman, Northwestern Pacific R. R. TT 2.8: SP 1.3: P 1. May 1915 to May 1917, June 1919 to May 1920, Nov. 1921 to April 1922 and Nov. 1922 to Aug. 1923 Asst. Engr. for Cozzens & Davies, Engrs., Salinas, Cal., in responsible charge of highway location, construction and design, survey, design of private irrigation projects, etc. TT 4.2: P 4.2: RC 4.2: D 2.5. May 1917 to June 1919 Private, Sergeant, Master Engr., Sr. Grade, and 2d Lieut., 18th Engrs., Ry., U. S. Army, foreign service, in responsible charge of railroad location and construction, design, harbor surveys, etc. TT 1.4: P 1.4: RC 1.4: D 1.4. May 1920 to May 1921 not on engineering work. May to Nov. 1921 Transitman on railroad location, J. G. White Eng. Co., Nicaragua. TT 0.6: P 0.6. Aug. 1923 to Oct. 1927 Locating Engr., until Feb. 1925 for Govt. of Panama, in responsible charge of location of 110 km. of highway, then for International Rys. of Central America, in responsible charge, of 65 miles Guatemala-Salvador link (under construction) and other

projects. TT 4.2: P 4.2: RC 4.2: D 4.2. April to Nov. 1922 Transitman, and Nov. 1927 to date Locating Engr. in responsible charge of 113 km. of highway location with R. W. Hebard & Co., Inc. TT 1.7: P 1.7: RC 1: D 1. TT 14.9: SP 1.8: P 13.1: RC 10.8: D 9.1. Refers to J. H. Caton, 3d, H. R. Falson, M. E. Gilmore, R. C. Hardman, R. W. Hebard, J. Lucey, S. F. Shaw, F. M. Townsend, R. K. West.

## 1550

(1) SHAW, FORBES DUNBAR, 79 Woodruff Ave., Brooklyn, N. Y. (Age 22. Born Brooklyn, N. Y.) 1927 C. E., Cornell Univ. TT 4: P 4. June 1927 to Feb. 1928 Engr., Concrete Steel Co., New York City, drafting plans, also some estimating and design, etc. TT 0.7: P 0.7: D 0.1. April 1928 to date Engr., Turner Constr. Co., 3 months as Timekeeper on large industrial warehouse, then Instrumentman on line and grade work on industrial project in Indiana. TT 0.6: P 0.6. TT 5.3: P 5.3: D 0.1. Refers to F. A. Barnes, L. C. Urquhart.

## 1551

(13) SIMONS, EDWARD WIDMAN, 3215 Clement St., San Francisco, Cal. (Age 24. Born San Francisco, Cal.) 1925 B. S. in C. E., Univ. of Cal. TT 4: P 4. May to Sept. 1925 with Dinwiddie Constr. Co., San Francisco, on layout and surveying of Oakland (Cal.) Central Bank. TT 0.1: SP 0.1. Sept. to Dec. 1925 Arch. Draftsman on residence design for Dr. F. A. Gawthorne. TT 0.2: SP 0.2. Dec. 1925 to May 1926 in private practice as Surveyor and Archt. Designer in San Francisco. TT 0.4: P 0.4: RC 0.4: D 0.4. May to Nov. 1926 Engr. in charge of design and construction on a store for The Emporium, San Francisco. TT 0.5: P 0.5: RC 0.5: D 0.5. Nov. 1926 to April 1927 with Dinwiddie Constr. Co., in charge of layout, lines, levels and interpretation of plans to trades on San Francisco Russ Bldg. TT 0.4: P 0.4: RC 0.4. April 1927 to date Engr., Redwood Manufacturers Co., San Francisco, in charge of erection and on design of wood-stave pipe and tanks, cooling towers, etc. TT 1.5: P 1.5: RC 1.5: D 1.5. TT 7.1: SP 0.3: P 6.8: RC 2.8: D 2.4. Refers to J. Cowin, R. E. Davis, C. Derleth, Jr., A. V. Garratt, C. G. Hyde, B. Jameyson, A. M. McPherson.

## 1552

(3) SMALL, HERBERT WESLEY, Jr., Arvida, Que., Canada. (Age 36. Born Concord, N. H.) Oct. 1913 to July 1915 with Walter McCulloh, Cons. Engr., Niagara Falls, N. Y., as Res. Engr. on inspections and design and drafting on industrial plants, etc. TT 1.7: P 1.7: D 0.7. July 1915 to July 1916 with The Austin Co., Philadelphia, Pa., on design, specification, etc., on industrial plants and commercial buildings. TT 1: P 1: D 1. July 1916 to Oct. 1917 with J. G. White Eng. Corporation, New York City, on design, investigations, etc., on steam and hydro-electric power plants. TT 1.3: P 1.3: D 1.3. Oct. 1917 to Nov. 1918 with U. S. Engr. Office, Wilmington, Del., on design of Ft. Saullsbury and coast defence investigations; Plant and Maintenance Engr., explosive plants at Nitro, W. Va., and Little Rock, Ark. TT 1.1: P 1.1: D 0.5. Nov. 1918 to April 1919 with L. E. Myers Co., Chicago, Ill., on preliminary investigations and design for hydro-electric development. TT 0.4: P 0.4: D 0.4. May 1919 to Oct. 1922 with Stone & Webster, Inc., Boston, Mass., on supervision of design, investigations, reports, appraisals, etc., on steam and hydro-electric power plants, industrial plants and commercial buildings. TT 3.5: P 3.5: RC 2: D 2.5. Oct. 1922 to Oct. 1927 Prin. Asst., Fargo Eng. Co., Jackson, Mich., in charge of design, investigations, reports, etc., on hydro-electric and steam-power plants. TT 5: P 5: RC 5: D 5. Oct. 1927 to date Chf. Engr., Alcoa Power Co., Arvida, Que., Canada, on design and construction of hydro-electric development, initial installation of 280 000 h. p. TT 1: P 1: RC 1: D 1. TT 15.1: P 15.1: RC 8: D 12.5. Refers to W. G. Fargo, H. A. Hageman, T. H. Hogg, H. S. Hunt, W. S. Lee, W. McCulloh, L. J. Towne.

## 1553

(10) STAFFORD, PAUL HENRY, Maryville, Tenn. (Age 21. Born Sevierville, Tenn.) 1928 B. S. in Civ. Eng., Univ. of Tenn. TT 4: P 4. Refers to T. W. Allen, N. W. Dougherty.

## 1554

(7) STEWART, LOWELL O., 618 Burnett Ave., Ames, Iowa. (Age 33. Born Watervliet, Mich.) 1917 B. S., Mich State Coll. 1927 M. S., and 1928 C. E., Iowa State Coll. TT 4: P 4. June 1917 to May 1923 with U. S. Coast and Geodetic Survey as follows: June to Dec. 1917 Deck Officer on ship repair in Alaska and planetable surveys and office work at Seattle, Wash.; Jan. 1918 to Feb. 1919 Aid on wire-drag work, in charge of end launch, computations, triangulation and office work at Seattle; Feb. 1919 to May 1921 Aid and Jun. Hydrographic and Geodetic Engr. on triangulation, hydrographic and topographic surveys in Philippine Islands, in charge of sounding and planetable parties, and of ship during repairs; May 1921 to May 1923 Jun. Hydrographic and Geodetic Engr. and Hydrographic and Geodetic Engr., on deep sea and launch hydrography of Virginia and Gulf Coast, being Second Officer and Acting First Officer, in charge of two special surveys. TT 6: P 6: RC 2.5:

D 0.5. May 1923 to March 1924 Foreman and Asst. Supt., Schumacher Constr. Co., on construction (\$100 000 hospital). TT 0.8: P 0.8. March to Sept. 1924 Chf. of Party, Michigan State Highway Dept., in charge of planetable party on topographic survey of bridge sites. TT 0.5: P 0.5: RC 0.5. Sept. 1924 to Sept. 1927 Instructor in, and Sept. 1927 to date Asst. Prof. of, Civ. Eng., Iowa State Coll.; teaching surveying, drainage and drawing. Summers Res. Engr. and Inspector on paving, etc. TT 4.1: P 4.1: RC 1.1: D 0.5. TT 15.4: P 15.4: RC 4.1: D 1. Refers to C. M. Cade, J. S. Dodds, W. L. Foster, A. H. Fuller, H. W. Hemple, A. Marston.

## 1555

(1) SUCRE, FRANCISCO JOSE, 5 Reichensteiner Str., Bale, Switzerland. (Age 32. Born Caracas, Venezuela.) 1921 C. E., Escuela de Ciencias Fisicas, Matematicas y Naturales. TT 4: P 4. 1917 to 1920 and March 1921 to Dec. 1922 with Ministry of Education, Caracas, Venezuela, 4 years as Asst., Physical Laboratory, School of Engrs., and Prof. of Elementary Geometry and Drawing, National School of Arts and Crafts, and after March 1921 commissioned by Venezuelan Govt., to study organization and methods of training in European engineering schools, visited England, Scotland, Belgium and Germany. TT 1.7: P 1.7. Aug. 1920 to Feb. 1921 Asst. Engr. with C. Toro Manrique, La Constructora, Engrs. and Contrs., Caracas, on computation and supervision of reinforced concrete works. Feb. 1923 to June 1927 with Ministry of Public Works of Venezuela, until Dec. 1923 on design and construction of abutments and erection of steel structure of bridge at San Juan de los Morros, from Jan. 1924 to June 1926 on construction of section of concrete road from Caracas to La Guayra, design and construction of three reinforced concrete bridges, and several retaining walls, and after June 1926 on construction of concrete road from La Guayra to Macuto, concrete paving of street Calle del Comercio at La Guayra, reinforced concrete bridge Rio Osorio La Guayra. TT 4.3: P 4.3: RC 4.3. TT 10: P 10: RC 4.3. Refers to J. M. Ibarra Cerezo, G. Moncur, C. M. Upham. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

## 1556

(15) TERRY, CHESTER W, 930 Chronicle Bldg., Houston, Tex. (Age 27. Born Nashville, Tenn.) 1925 B. S. in C. E., Agri. and Mech. Coll. of Tex. TT 4: P 4. March to Sept. 1920 Rodman, Chainman and Instrumentman, City of Dallas, Tex. TT 0.3: SP 0.3. March to April 1925 Draftsman on substation, Texas Power & Light Co., Dallas, Tex., detailing steel-switching tower stands. TT 0.1: P 0.1. April 1925 to date Asphalt Chemist, Pittsburgh Testing Laboratory of Texas, on supervision, designing mixes and plant control of all asphalt paving plants in city of Houston, Tex. TT 3.6: P 3.6: RC 3.6: D 3.6. TT 8: SP 0.3: P 7.7: RC 3.6: D 3.6. Refers to J. T. L. McNew, J. C. McVea, L. T. Peden, J. J. Richey, L. H. Schlom.

## 1557

(1) THEOBALD, JOHN JACOB, 519 West 143d St., New York City. (Age 24. Born New York City.) A. B. and B. S. in Eng. and 1928 C. E., Columbia Univ. TT 4: P 4. Refers to A. H. Beyer, J. K. Finch, W. J. Krefeld, C. R. Wyckoff.

## 1558

(1) TIO, AURELIO, San German, Porto Rico. (Age 21. Born San German, Porto Rico.) 1928 C. E., Syracuse Univ. TT 4: P 4. June 1928 to date Jun. Asst. Engr., Dept. of Interior, Porto Rico, on construction, design, road planning and surveying. TT 0.4: P 0.4. TT 4.4: P 4.4. Refers to L. Mitchell, S. D. Sarason.

## 1559

(13) TONNEY, GEORGE EDWARD, 334 Mason St., San Francisco, Cal. (Age 47. Born Roseville, Ill.) 1900-1902 student Coll. of Civ. Eng., Univ. of Illinois. TT 1: P 1. July to Dec. 1902 Recorder of Topography for Mississippi River Comm., Cairo, Ill. to Vicksburg, Miss., surveys, channel relocation, etc. TT 0.2: SP 0.2. Feb. 1903 to March 1905 Rodman, Draftsman, Topographer, and Instrumentman, Chicago & North-Western Ry., maintenance. TT 1.2: SP 0.9: P 0.3. April 1905 to April 1906 Masonry Designer, Chf. Engrs. Office, Atchison, Topeka & Santa Fe Ry., Topeka, Kans., bridge, bridge sub-structure and masonry structures, maintenance, new construction and 2nd-track development. TT 1: P 1: RC 1: D 1. May 1906 to May 1907 Draftsman, Topographer and Asst., St. Louis, Rocky Mountain & Pacific Ry., Raton, N. Mex., 6 months on location, Taos Pass, and 6 months in office on final estimates. TT 0.8: SP 0.3: P 0.5. June to Nov. 1907 Asst. Engr., Chf. Engr.'s Office, North Coast Ry., Spokane, Wash., estimating costs, preparing and designing standard construction plans. TT 0.5: P 0.5: RC 0.5: D 0.2. Jan. to Sept. 1908 in Chf. Engrs. Office, Philippine and Oriental Rys., Iloilo, details for yard layout of railway shops and repairs. TT 0.7: P 0.7: RC 0.7: D 0.3. Oct. 1908 to Sept. 1909 studying engineering methods and structures in Europe. Oct. 1909 to July 1910 with Geo. T. Price and E. A. Jackson, Cons. Engrs., Denver, Colo., on irrigation surveys, water resource investigation and irrigation proposals and development. TT 0.9: P 0.9: RC 0.9. Aug. 1910 to Nov. 1911 Chf. Engr.,

Middle Park Improvement Co., irrigation project, Denver & Colorado Springs, Colo., investigation of economic feasibility of proposed developments, classification of irrigable lands, computations and reports, several projects. TT 1.3; P 1.3; RC 1.3; D 0.5. Nov. 1911 to March 1912 Asst. Engr., New Mexico Tie & Timber Co., Taos, N. Mex., on topographic surveys (135 sq. mi.) mountain location, survey of land grant boundary, topography, mapping, etc. TT 0.4; P 0.4; RC 0.4. April to Sept. 1912. Chf. Engrs. Office, M. of W., Southern Pacific Co., San Francisco, designing yard layout, plan of development, arrangement and estimating for proposed central railroad shops. TT 0.5; P 0.5; RC 0.5; D 0.5. Oct. 1912 to May 1913 Bridge Engr., C. A. Smith Ry. (extension of Southern Pacific), Coos Bay, Ore., in charge of bridge and railway construction. TT 1.7; P 1.7; RC 1.7; D 0.5. (Jan. 1914 to Dec. 1917 Special Engr., City of Myrtle Point, Ore., adjustment and establishment of street grades, construction of sewer system, street paving, etc., also Engr. Port. of Coquille River, Ore. TT 4; P 4; RC 3; D 1.5. Dec. 1917 to Dec. 1920 invalid. Dec. 1920 to Aug. 1928 with Eng. Dept., Spring Valley Water Co., San Francisco, system supply and city distribution, field and office, location of structures, layouts, maintenance and (part of time) construction. TT 7.5; P 7.5; RC 2; D 0.7. TT 21.7; SP 1.4; P 20.3; RC 12; D 5.2. Refers to W. W. Brier, R. E. Davis, H. H. Ferree, E. J. Fucik, M. M. O'Shaughnessy, J. H. Polhemus, P. Schuyler, W. B. Storey.

**1560** (15) VALDES, AGUSTIN MANUEL, 2a San Juan de Letran 24, Desp. 102, Mexico, D. F., Mexico. (Age 27. Born Tepic, Nayarit.) 1925 B. S. C. E., Univ. of Dayton. 1928 C. E., Univ. of Mexico. TT 4; P 4. July to Oct. 1925 Constr. Engr., Cia. Constructora D. F. Mexico, in charge of construction of houses. TT 0.3; P 0.3; RC 0.3. Oct. 1925 to Sept. 1926 Asst. Location Engr., Byrnie Bros., Constr. Co., in charge of party on highway location in Mexico. TT 1; P 1; RC 1. Oct. to Dec. 1926 Chf. of Party, Mexican Irrigation Comm., on triangulation, and canal location for Papigochic River, Chih., Mexico. TT 0.2; P 0.2; RC 0.2. Dec. 1926 to date with J. G. White Eng. Corporation, until May 1927 as Chf. of Party, coordinate system for topography, canal location and property lines, Calles Dam, Est. Pabellon, then Engr.-in-Chg. of arch analysis, same dam, design of canal structure and of diversion dam, and since April 1928 in Mexico City on design of canal structures, estimates and costs. TT 2; P 2; RC 1.5; D 1.5. TT 7.5; P 7.5; RC 3; D 1.5. Refers to H. P. Bunker, W. L. Drager, J. Hinds, C. H. Howell, R. Laimon, B. T. Schad, F. E. Weymouth.

**1561** (11) VRYDAGH, JULIAN ALAN, 1256 West Twenty-Ninth St., Los Angeles, Cal. (Age 31. Born Terre Haute, Ind.) 1918 B. S., Rose Pol. Inst. TT 4; P 4. Feb. 1918 to Oct. 1919 Estimator and Cost Clerk, Pittsburgh (Pa.) Lamp Brass & Glass Co. TT 0.8; SP 0.8. Oct. 1919 to Jan. 1923 Structural Steel Detailer, and Sept. 1923 to Sept. 1924 Checker, American Bridge Co., Ambridge, Pa., detailing and checking structural steel for office and mill buildings. TT 2.6; SP 1.6; P 1. Jan. to Sept. 1923 and Sept. 1924 to date with Union Iron Works of California, Los Angeles, Cal., until Sept. 1923 as Detailer and Checker of structural steel details, Sept. 1924 to Dec. 1925 Structural Steel Designer, designing and estimating structural steel for industrial buildings, and since Jan. 1926 Engr. in charge of design of industrial buildings, supervising design of industrial buildings, monorail systems, crane runways, towers, motion-picture stages, etc. TT 4.7; SP 0.2; P 4.5; RC 2.8; D 1.3. TT 12.1; SP 2.6; P 9.5; RC 2.8; D 1.3. Refers to R. G. Manning, B. I. Means, R. P. Miller, G. E. Poucher, G. F. Sparhawk.

**1562** (1) WEIBEL, SAMUEL RODERICK, 74 Clinton Ave., Newark, N. J. (Age 25. Born Winthrop, Mass.) 1928 B. S., Mass. Inst. Tech. TT 4; P 4. June 1928 to date Chairman, Pennsylvania R. R. TT 0.2; SP 0.2. TT 4.2; SP 0.2; P 4. Refers to J. B. Babcock, 3d, C. M. Spofford, J. J. Vail.

**1563** (10) WHITENER, JOHN SUMMIE, 1202 Cowper Drive, Raleigh, N. C. (Age 26. Born Hickory, N. C.) Registered Engr., State of North Carolina. 1923 B. E., N. C. State Coll. TT 4; P 4. Sept. 1923 to April 1924 Instrumentman and Asst. Chf. of Party, on location, A. & W. N. C. R. R. TT 0.3; SP 0.3. April to July 1924 Sub-Div. Engr., Carolina Land & Exchange Co., Greensboro, N. C. TT 0.2; P 0.2; RC 0.2; D 0.2. Aug. 1924 to Sept. 1925 Jun. Engr., Bureau of Eng., North Carolina State Board of Health, on water-supply and sewage-disposal work. TT 1.1; P 1.1. Sept. 1925 to Sept. 1926 Asst. Res. Engr. for Wm. C. Olsen, Inc., Cons. Engrs., Raleigh, N. C., building sewage-pumping station, sewer lines, water mains and storm sewers, elevated steel tanks and tide-water dam on pile foundations. TT 1; P 1. Sept. 1926 to Feb. 1928 with City Water Dept., Raleigh, as Supt. responsible

for operation of filtration plant. TT 1.5: P 1.5: RC 1.5. Feb. 1928 to date Asst. Engr., Bureau of Eng., North Carolina State Board of Health, in charge of all water-supply and water-purification work. TT 0.8: P 0.8: RC 0.8: D 0.8. TT 8.9: SP 0.3: P 8.6: RC 2.5: D 1.1. Refers to T. S. Johnson, C. L. Mann, F. T. Miller, H. E. Miller, W. C. Olsen, G. F. Syme, H. Tucker.

1564

(7) WIEPKING, CHRISTOPHER ARMIN, 608 Fifty-Second St., Milwaukee, Wis. (Age 29. Born Grafton, Wis.) 1921 B. S. in C. E., and 1926 C. E., Univ. of Wis. TT 4: P 4. Summer 1920 Jun. Engr., Illinois Div. of Highways, Springfield, Ill., drafting and estimating. Sept. 1920 to Sept. 1927 Instructor in Mechanics, Coll. of Eng., Univ. of Wisconsin, teaching, research work, commercial testing, advisory work, etc. TT 6.2: P 6.2: RC 2: D 2. Sept. 1927 to date Laboratory Engr., Bureau of Street Constr. and Repairs, Dept. of Public Works, Milwaukee, Wis., in charge of city testing laboratory, of specifications for concrete pavement, field control and design of concrete, and in charge of concrete and materials for pavements, also advisory service to other Depts., etc. TT 1.1: P 1.1: RC 1.1: D 1.1. TT 11.3: P 11.3: RC 3.1: D 3.1. Refers to G. F. Daggett, R. W. Gamble, D. W. Mead, J. P. Schwada, L. S. Smith, F. E. Turneaure, L. F. Van Hagan.

1565

(11) WILSON, WINFRED ERNEST, 2442 Marvin Ave., Los Angeles, Cal. (Age 33. Born Baltimore, Md.) 1917 B. Sc. in C. E., Univ. of So. Cal. TT 4: P 4. May to Aug. 1917 Hydrographer, U. S. Reclamation Service, Phoenix, Ariz., recording water flow, investigating ground water levels. TT 0.1: SP 0.1. Sept. 1917 to Aug. 1919 Second Lieut. (1 year) and 1st Lieut., Corps of Engrs., U. S. Army, 1 year in France. Sept. 1919 to Jan. 1920 Engr., Wallace Refineries, Taft, Cal., pipe-line mapping, plant layout and construction. TT 0.3: P 0.3: D 0.3. Jan. to June 1920 Field Engr., Southwest Cotton Co., Goodyear, Ariz., mapping, surveys, grading, hydraulic studies, ground water investigation. TT 0.5: P 0.5: RC 0.3. Aug. 1920 to Dec. 1922 Structural Engr., City of Los Angeles, until Feb. 1922 with Harbor Dept., being Asst. to Chf. Draftsman, in charge of structural design, then with Bldg. Dept., checking buildings, being Asst. to Chf. Engr. TT 2.4: P 2.4: RC 0.2: D 2.4. May 1923 to April 1924 Chf. Engr., Gen. Eng. Co., consulting and designing, subdivisions, buildings. TT 0.9: P 0.9: RC 0.9: D 0.9. April 1924 to July 1926 Res. Engr. with J. P. Perrine, Los Angeles, rebuilding Ocean Park Pier, structural design, etc., in charge of reconstruction, design, etc. TT 2.2: P 2.2: RC 2.2: D 1.5. Aug. 1926 to Jan. 1928 Cons. Engr., Los Angeles, structural design, etc. TT 1.5: P 1.5: RC 1.5: D 1.5. Jan. 1928 to date Structural Engr., United Pacific Securities Corporation, Los Angeles, in charge of structural design. TT 0.9: P 0.9: RC 0.9: D 0.9. TT 12.8: SP 0.1: P 12.7: RC 6: D 7.4. Refers to R. N. McMaster, W. Mellema, A. F. J. Miller, R. P. Miller, B. Noyce, A. Taylor.

1566

(11) ZAKI, IBRAHIM MOHAMMED, Bahr St., Giza, Egypt. (Temporary address, care, Reclamation Bureau, 1441 Welton St., Denver, Colo.) (Age 31. Born Cairo, Egypt.) 1918 Irrigation and Civ. Eng., Cairo School of Eng. July 1918 to June 1923 Dist. Engr., Irrigation Dept., Cairo, Egypt, on water distribution, hydrographic work on canal and drainage systems, design of canals and canal structures, surveys, river-protection work and supervision of maintenance. TT 5: P 5: D 2. June 1923 to June 1925 Asst. Engr., Sennar Dam, Anglo Egyptian Sudan, supervising construction, checking and setting out various parts, measurements, etc. TT 2: P 2: D 1. June 1925 to Dec. 1927 Asst. Director of Works, White Nile Projects, investigations of Gebel Aulia dam and reservoir, being head of survey party; hydrographic work in White Nile, estimates for diverting Bahr el Gebel, etc. Dec. 1927 to date studying reclamation in United States for Egyptian Government. TT 2.5: P 2.5: RC 2: D 1. TT 9.5: P 9.5: RC 2: D 4. Refers to I. E. Houk, W. H. Nalder. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

## FOR TRANSFER

## FROM THE GRADE OF ASSOCIATE MEMBER

1567

(12) ARNTSON, JULIAN ARTHUR, Assoc. M., 1019 South Lawrence St., Tacoma, Wash. (Elected Oct. 8, 1918.) (Age 41. Born Tacoma, Wash.) July 1905 to July 1906 Chainman and Draftsman with Kelley & Chapman, Min. Engrs., Tacoma, Wash. TT 0.5: SP 0.5. Sept. 1906 to Feb. 1907 Draftsman, Northern Pacific Ry. TT 0.2: SP 0.2. March to May 1907 and May to Sept. 1909 Camp Draftsman, Chicago, Milwaukee & Puget Sound Ry., on location. TT 0.6: SP 0.6. July to Oct. 1910 Transitman, March 1912 to Dec. 1913 Constr. Drafts-

man, and Sept. 1914 Transitman, Chicago, Milwaukee & St. Paul Ry. TT 1.7: SP 0.6: P 1.3. Jan. to April 1914 Constr. Draftsman, Orem Lines, Salt Lake City, Utah, Interurban railway construction. TT 0.3: P 0.3. May to Aug. 1914 Topographer and Res. Engr., Southern Montana R. R. TT 0.3: P 0.3. Oct. 1914 to Aug. 1915 Pilot Engr., Milwaukee, St. Paul & Sault Ste. Marie Ry., on valuation in North Dakota and Minnesota. TT 0.9: P 0.9. Sept. 1915 Topographer for A. O. Powell, Cons. Engr., Seattle, Wash., on harbor survey at Pysht, Wash. TT 0.1: P 0.1. Oct. 1915 to Dec. 1919 and Aug. 1920 to March 1921 with American Smelting & Refining Co., until Dec. 1919 as Field Engr., at Tacoma, Wash., Hayden, Ariz., Perth Amboy, N. J., in charge of construction in field, yard tracks, bins, buildings, furnaces, power plants, etc., and after Aug. 1920 in New York office on design and layout, buildings, machinery, ore-handling devices, and general plant layouts. TT 4.9: P 4.9: RC 4: D 3.2. Jan. to July 1920 with American Car & Foundry Co., New York Office, design and layout of buildings, machinery, sewers, yard tracks, etc. TT 0.6: P 0.6: D 0.6. April 1921 to Dec. 1925 with Middlesex Water Co., Woodbridge, N. J., as Engr. in charge of design and construction of buildings, installation of machinery, etc., made valuation inventory of plants and distribution system. TT 4.8: P 4.8: RC 4.8: D 4.8. June 1907 to April 1909, and Nov. 1910 to Feb. 1912 Transitman and Draftsman, and Oct. 1909 to June 1910 Chf. of Party on street improvement and location of 12 miles of gravity water main, and Jan. 1926 to date Senior Engr., in charge of design and construction of sewers and storm drains (projects constructed, \$350 000, additional projects designed and estimated \$2 750 000), all for City Eng. Dept., Tacoma. TT 6: SP 0.8: P 5.2: RC 2.9: D 2.9. TT 20.8: SP 2.3: P 18.5: RC 11.7: D 11.5. Refers to T. R. Beeman, V. Gongwer, C. E. Putnam, W. J. Roberts, J. L. Stannard.

## 1568

(10) BETTS, CLIFFORD AULL, Assoc. M., 705 James Bldg., Chattanooga, Tenn. (Elected Junior Sept. 12, 1916; Assoc. M. May 12, 1919.) (Age 38. Born Chattanooga, Tenn.) 1910 B. S. in C. E., Case School of Applied Sci. TT 4: P 4. June to Oct. 1910 on topographical survey and map of 1 500-acre estate of C. E. Buck, Kensington, Ga. TT 0.2: SP 0.2. Oct. 1910 to May 1911 Draftsman and Transitman, Tennessee, Alabama & Georgia R. R. TT 0.4: SP 0.3: P 0.1: D 0.2. May 1911 to March 1912 Asst. Engr., Hamilton County Highway Comm., Chattanooga, Tenn., designing concrete structures, drafting, surveys and estimates, Res. Engr. on asphalt paving construction. TT 0.8: P 0.8: RC 0.5: D 0.3. March to June 1912 with Chickamauga and Chattanooga National Park Comm., on survey and map, Crest Rd. TT 0.3: P 0.3: RC 0.3. Jan. to Feb. 1916 Computer, Interstate Commerce Comm., on railroad valuation, Chattanooga TT 0.1: P 0.1. Feb. 1916 to June 1917 Res. Engr., Cuban Portland Cement Co., Mariel, Cuba, on construction of cement plant. TT 1.3: P 1.3: RC 0.9: D 0.4. Aug. 1917 to Dec. 1918 with U. S. Army, about one year overseas; first at training camp, Ft. Monroe, Va., Nov. 1917 commissioned First Lieut., C. A. C.; March 1918 graduated from Heavy Artillery School, Mailly, France; April to Nov. 1918 at Front with Battery E, 44th Artillery, C. A. C.; Sept. 1918 became Capt., from Oct. to Nov. 1918 being Battery Commander; at present Major, C. A. Reserve. TT 1: SP 0.4: P 0.6. June 1919 to May 1921 Chf. Engr., Gen. Mgr., Secy. and Treas., Standard Ground Rock & Fertilizer Co., later Standard Fertilizer Co., Centerville, Tenn., designed, constructed and (after Nov. 1919) operated plant (\$150 000). TT 1.5: SP 0.5: P 1: RC 1: D 0.5. Jan. to June 1919 with Prairie State Fertilizer Co., Nashville, Tenn., in responsible charge of design and construction of fertilizer filler plant. TT 0.4: P 0.4: RC 0.4: D 0.2. May to Oct. 1921 with Ellis Soper, Cons. Engr., on investigation, surveys, maps and estimate of raw materials of proposed cement plant site, Knoxville. TT 0.4: P 0.4: RC 0.4. Oct. 1921 to Dec. 1922 Supt. of Constr., Hudson Valley Portland Cement Co., Catskill, N. Y. TT 1.2: P 1.2: RC 0.7: D 0.5. March 1924 to Jan. 1925 with L. C. Smallwood Contr. Co., Gen. Contrs., Chattanooga, in responsible charge of construction. TT 0.8: P 0.8: RC 0.5. Sept. 1912 to June 1916 associated with Edw. E. Betts, Cons. Engr., in general engineering practice, June 1923 to March 1924 with Edw. E. Betts and Edw. E. Betts Eng. Co., Cons. Civ. Engrs., and Jan. 1925 to date member of firm, Edw. E. Betts Eng. Co., on subdivisions, developments, drafting, highway and railroad location, surveys, designs and estimates of municipal improvements, streets, sewers, water-works and bridges, investigations, reports, etc. TT 7.9: P 7.9: RC 4.5: D 1.4. TT 20.2: SP 1.3: P 18.9: RC 9.2: D 3.5. Refers to J. A. Fairleigh, J. E. Morelock, W. H. Sears, E. C. Soper, W. H. Wilson, D. H. Wood.

## 1569

(7) COYKENDALL, CLAUDE CARLISLE, Assoc. M., 808 Ridgwood Ave., Ames, Iowa. (Elected March 9, 1920.) (Age 41. Born Glidden, Iowa.) 1910 B. S. in C. E., Iowa State Coll. TT 4: P 4. June to Nov. 1910 drainage and surveying in Carroll County, Iowa, being Asst., Instrumentman and Draftsman. TT 0.4: P 0.4. Dec. 1910 to June 1911 Rodman and

Draftsman, Morgan Eng. Co. of Memphis, Tenn., on surveys, drainage and drainage investigations. *TT 0.5: P 0.5.* Sept. 1911 to June 1913 Instructor in Surveying, Civ. Eng. Dept., Iowa State Coll. *TT 1.7: P 1.7: RC 1.7.* Feb. 1918 to May 1919 County Engr., Polk County, Iowa, in charge of design and construction of road and bridge work. *TT 1.2: P 1.2: RC 1.2: D 1.2.* May 1923 to May 1927 on highway construction, grading and paving, in responsible charge of organization that constructed approx. 50 miles of concrete pavement in Iowa and Missouri. *TT 4: P 4: RC 4.* June 1913 to Feb. 1918 Dist. Engr., May 1919 to May 1923 Engr. of Road Administration and (last year) Asst. Chf. Engr., in charge of road administrative work, and since May 1927 Administration Engr. in charge of administrative matters, outlining program, awarding and approving contracts for construction work, etc., all for Iowa State Highway Comm. *TT 10.3: P 10.3: RC 10.3. TT 22.1: P 22.1: RC 17.2: D 1.2.* Refers to J. H. Ames, O. W. Crowley, R. W. Crum, J. S. Dodds, A. H. Fuller, E. F. Kelley, C. B. McCullough, F. H. Mann, A. Marston, W. H. Root, F. R. White.

## 1570

(7) CROWLEY, ORVILLE WILFRID, Assoc. M., 710 S. & L. Bldg., Des Moines, Iowa. (Elected April 19, 1920.) (Age 37. Born Grundy Center, Iowa.) 1913 B. S. in C. E., Iowa State Coll. *TT 4: P 4.* Summer 1911 Chainman and Inspector, and summer 1912 Rodman, Chicago & North Western Ry. Co. April 1913 to June 1916 Res. Engr., Iowa Highway Comm., on construction of steel and concrete bridges and culverts, highway pavements and surveys for highway improvement. *TT 3: P 3: RC 3: D 0.5.* June 1916 to Oct. 1917 Constr. Engr. for Executive Council of Iowa in charge of construction of reinforced concrete viaduct on Iowa Capitol Grounds. *TT 1.3: P 1.3: RC 1.3: D 0.3.* Oct. 1917 to Oct. 1921 Chf. Engr. on Capitol Grounds extension, State Fish and Game Dept., and for State Park improvements, in charge of design and construction of excavation, sewers, lighting and watering systems, roads and pavements, fish hatchery and power plant. *TT 4: P 4: RC 4: D 2.* Nov. 1921 to Nov. 1922 Gen. Mgr., Iowa Gravel Co., in charge of design, construction and operation of sand and gravel plant. *TT 1: P 1: RC 1: D 0.5.* Nov. 1922 to Feb. 1923 consulting engineering at Des Moines, Iowa. *TT 0.3: P 0.3: RC 0.3.* Oct. 1921 to date Engr. Member, Iowa Boundary Comm., co-operating with similar commissions from other states in settlement of state boundaries; since Feb. 1923 also Executive Secy. and Engr., Central Branch, Associated Gen. Contrs. of America. *TT 5.8: P 5.8: RC 5.8. TT 19.4: P 19.4: RC 15.4: D 3.3.* Refers to C. C. Coykendall, R. W. Crum, P. F. Hopkins, G. W. Koss, R. C. Marshall, Jr., A. Marston, F. R. White.

## 1571

(4) DuBOIS, ROBERT SEWALL, Assoc. M., 157 West Forty-Eighth St., Bayonne, N. J. (Elected April 3, 1922.) (Age 37. Born Wichita, Kans.) 1915 B. A. in Geology, Yale Coll. 1916 Ph. B. in Civ. Eng., Sheffield Sci. School. *TT 4: P 4.* June 1916 to Nov. 1917 Structural Draftsman, Bridge Dept., New York, New Haven & Hartford R. R. Co., some design, steel and concrete, calculations, etc. *TT 1.2: SP 0.2: P 1: RC 0.2: D 1.2.* Nov. 1917 to Feb. 1919 Private, Corporal and 2d Lieut., Corps of Engrs., U. S. Army, staff duties in Intelligence Sec. *TT 0.9: SP 0.4: P 0.5: RC 0.5.* March to June 1919 Inspector of stationary boilers, Delaware & Rio Grande Western R. R. Co., on working pressure investigations and calculations. *TT 0.1: SP 0.1.* June 1919 to May 1920 Draftsman and Field Engr., May 1920 to June 1921 Res. Engr. on concrete arch bridge construction, and June 1921 to June 1925 Bridge Engr., Colorado State Highway Dept. *TT 6: P 6: RC 5: D 5.3.* June 1925 to date Chf. Bridge Designer, New Jersey State Highway Dept., Route No. 1 Extension, connection to Holland Vehicular Tunnels, preliminary designs and estimates, preparation of contract drawings. *TT 3.3: P 3.3: RC 3.3: D 3.3. TT 15.6: SP 0.8: P 14.8: RC 9: D 9.8.* Refers to L. F. Copeland, S. Johansson, F. Lavis, O. T. Reedy, L. R. Shellenberger, S. A. Snook.

## 1572

(10) HASSLER, HARRY JOHN, Assoc. M., P. O. Box 107, Asheville, N. C. (Elected Aug. 30, 1926.) (Age 43. Born Pittsburgh, Pa.) Completed 3-year Special Civ. Eng. course, Carnegie Inst. of Technology (1910) and post-graduate work in reinforced concrete, higher structures, movable and long span bridges and by-products chemistry (1911-1912-1917). 1904 to 1907 and 1910 to 1914 Eng. Apprentice, Draftsman and Squad Boss on bridges, buildings, etc., American Bridge Co., Ambridge, Pa. *TT 3.5: SP 3.5: D 1.* 1908 to 1909 Instrumentman, U. S. Govt., Public Land Survey, Arizona, construction work, Canadian Westinghouse Co., Hamilton, Ont. *TT 0.2: SP 0.2.* April 1914 to April 1916 Designer and Estimator with Heyl & Patterson, Pittsburgh, Pa., movable bridges, coal- and coke-handling machinery and concrete and steel structures. *TT 1: SP 1.* April 1916 to May 1920 Designer, Structural Engr. and Asst. Engr., by-product plants, The Koppers Co., Pittsburgh,

charge of 30 men; responsible charge \$10 000 000. TT 3.6: SP 0.5: P 3.1: RC 2: D 1. May 1920 to June 1921 Estimator and Div. Engr., Arthur G. McKee Co., Cleveland, Ohio, blast furnaces, steel mills, stone-crushing plants, etc. TT 0.6: SP 0.6: D 0.6. June 1921 to Dec. 1922 Structural Engr., Cleveland Elec. Illuminating Co., responsible for design of tunnels, power plants, etc. TT 1.5: P 1.5: RC 1.5: D 1.5. Dec. 1922 to date with H. K. Ferguson Co., Cleveland, until May 1926 as Chf. Draftsman in complete charge of design and estimating, and since then Asst. Chf. Engr., in charge of all engineering work and Eng. Dept. (value of project handled \$50 000 000); at present in charge of \$10 000 000 rayon plant installation. TT 5.9: P 5.9: RC 5.9: D 5.9. TT 16.3: SP 5.8: P 10.5: RC 9.4: D 11. Refers to W. P. Brown, C. G. French, K. H. Osborn, R. E. J. Summers, H. R. Thayer, E. B. Thomas.

## 1573

(13) HAWLEY, GEORGE WILLIAM, Assoc. M., 2409 College Ave., Berkeley, Cal. (Elected Junior Sept. 2, 1914; Assoc. M. May 13, 1918.) (Age 39. Born Portland, Ore.) 1913 B. S. in Civ. Eng., and 1916 C. E., Stanford Univ. TT 4: P 4. Summer 1912 Inspector and Material Clerk, Pennsylvania Steel Co., on steel bridge erection and construction. May 1913 to Jan. 1914 Draftsman, Computer and Hydrographer, Oregon Elec. Ry. Co., on hydro-electric investigation. TT 0.4: SP 0.4. Jan. 1914 to Oct. 1917 with South San Joaquin Irrigation Dist. as follows: Jan. to July 1914 Inspector on irrigation structures; July 1914 to April 1915 in charge of construction of 500 sec. ft. automatic siphon spillway (3 months) and 45-mile telephone system (6 months); after April 1915 Engr. in charge of construction of hydraulic fill dam (1 300 ft. long), embankment, outlet tunnel (600 sec. ft.), control tower and regulating works. TT 3.5: SP 0.3: P 3.2. Oct. 1917 to date with East Bay Water Co., Oakland, Cal., having general supervision of hydrography, underground water investigation, special engineering studies, etc. in connection with litigation and arbitration, engaged as follows: Oct. 1917 to Jan. 1921 as Constr. Engr., San Pablo Project (\$3 500 000), including hydraulic fill dam (165 ft. high), concrete lined supply tunnel (14 000 ft. long), purification plant (12 000 000 gal.), dual wasteways (12 000 sec. ft.), control tower regulating structure, county highway (5 miles), etc. (cost of project \$3 500 000); Jan. 1921 to March 1927 Engr. in charge of general construction (1 year), of investigation of underground and surface supplies (1½ years), of water supply and investigation to determine and report on 200 000 000-gal. water supply for cities on easterly shore of San Francisco Bay (1 year) and of water supply investigation and construction, Upper San Leandro Project, involving hydraulic fill dam (185 ft. high), concrete-lined supply tunnel (7 200 ft.), rapid sand purification plant (12 000 000 gal.), wasteway (6 000 sec. ft.), control tower, regulating structures and other appurtenant works (\$2 500 000) (3 years); since March 1927 Asst. Chf. Engr. in charge of construction, operation and maintenance. March 1926 to date also in private practice engaged as follows: March to Aug. 1926 on investigation and report on storage project for 100 000 acres of irrigable land, Pacific Water Co.; Aug. 1926 to April 1927 with Port Costa Water Co., engineering investigation report for 10 000 000-gal. domestic and industrial water supply involving river diversions, storage, purification and transmission (estimated cost \$4 000 000); since Sept. 1928 Cons. Engr., El Dorado irrigation district (35 000 acres), irrigation, development of water supply; also past 3 years on engineering investigations and court presentation involving riparian water rights for 3 000-acre tract on Putah Creek, and past 2 years advising on design and construction of water supply systems for minor municipalities and companies. TT 11.1: P 11.1: RC 8.8: D 4. TT 19: SP 0.6: P 18.4: RC 11.1: D 5.5. Refers to D. W. Albert, J. R. Freeman, A. Griffin, H. L. Haehli, A. Hazen, F. C. Herrmann, C. G. Hyde, C. D. Marx, W. Mulholland, R. A. Monroe, G. Wilhelm.

## 1574

(1) MADDEN, CHARLES MICHAEL, Assoc. M., 383 Jay St., Brooklyn, N. Y. (Elected Sept. 9, 1919.) (Age 40. Born New York City.) Licensed Prof. Engr. and Land Surveyor, New York State. March 1906 to Aug. 1907 Axeman, Chainman and Rodman, Rapid Transit R. R. Comm., New York City. TT 0.7: SP 0.7. Sept. 1907 to Jan. 1926 (except Nov. 1915-March 1916 and Sept. 1917-Jan. 1919) with Board of Water Supply, New York City, as follows: Sept. 1907-March 1912 Rodman, computing, estimating and designing culverts, road changes, etc. (1 year) and in charge of survey party (2½ years); April 1912 to Oct. 1915 Inspector, being Chf. Asst. on 2½-mile section of open-cut aqueduct construction (1½ years) and inspecting construction of Ashokan Aerator, Catskill Aqueduct (over 2 years); April 1916 to Aug. 1917 Inspector in charge of diamond-drill test borings, Shandaken Tunnel, Catskill Aqueduct; Feb. 1919 to March 1922 Asst. Sec. Engr., on construction of 5-mile section of Shandaken Tunnel, in charge of highway construction around Schoharie Reservoir and on experimental work relative to design and on construction of Gilboa

Dam; after March 1922 Sec. Engr. on construction of steel pipe siphons at Foundry and Indian Brooks, Catskill Aqueduct. TT 15.6: SP 1: P 14.6: RC 9.9: D 4.6. Nov. to Dec. 1915 with New York State Highway Dept. as Inspector of Constr. on, and Jan. to March 1916 with J. L. Hayes Constr. Co., in charge of engineering work in building Storm King Highway. TT 0.3: SP 0.1: P 0.2: RC 0.2. Sept. 1917 to Jan. 1919 Second Lieut., Engrs., U. S. Army, from Nov. 1917 to June 1918 as Military Topographer, U. S. Geological Survey, then with 29th Engrs., A. E. F., as Printing Officer and reproducing maps for Intelligence Sec. TT 1.4: P 1.4: RC 1.4. Feb. 1926 to date with Board of Transportation, New York City, until June 1927 as Asst. Sec. Engr. on subway construction, St. Nicholas Ave. ( $\frac{1}{2}$  mile) 122d to 132d St., New York City, and Church St. ( $\frac{1}{2}$  mile), New York City, and since June 1927 Sec. Engr. on subway construction along Jay St., Nassau St. to Willoughby St., Brooklyn. TT 2.7: P 2.7: RC 2.7: D 2.7. TT 20.7: SP 1.8: P 18.9: RC 14.2: D 7.3. Refers to C. L. Bogert, J. A. Guttridge, G. G. Honness, T. F. McQuade, T. Meriman, R. Ridgway, J. F. Sanborn, J. R. Slattery, J. W. Smith.

1575

(2) MORGAN, NATHAN WILSON, Assoc. M., Bureau of Public Roads, Montpelier, VT. (Elected April 3, 1922.) (Age 37. Born East Downingtown, Pa.) 1916 B. S. in C. E., Univ. of Colorado. TT 4: P 4. June 1916 to Feb. 1919 Draftsman, American Bridge Co., Lassing Plant, on structural steel details for bridges and buildings, 3 months in templet shop, some estimating and design. TT 1.6: SP 1.1: P 0.5: D 0.5. March to Aug. 1919 Structural Designer, Frazier-Sheal Co., Engrs. and Constr., Cleveland, Ohio, designing concrete structures. TT 0.4: P 0.4: D 0.4. Aug. 1919 to March 1921 Structural Designer and Field Engr., Osborn Eng. Co., Cleveland, designing concrete buildings, Field Engr. in charge of construction of concrete baseball stadium, American League, Cleveland. TT 1.6: P 1.6: D 1.6. June to Aug. 1921 Office Engr., E. Burkhardt & Sons, Denver, Colo., on structural steel details. TT 0.1: SP 0.1. Sept. 1921 to July 1923 Asst. Bridge Engr., Colorado State Highway Dept., Denver, in charge of office work (under Bridge Engr.) on designs and plans of steel, concrete and timber highway bridges, checking shop plans, inspections. TT 1.8: P 1.8: RC 1.8: D 1.8. July 1923 to May 1924 Designer, Baltimore & Ohio R. R., Baltimore, Md., designing and checking railroad bridges, steel details and shop plans. TT 0.8: P 0.8: RC 0.8: D 0.8. June to Oct. 1924 Draftsman, Bethlehem (Pa.) Steel Co., on structural steel detail plans for bridges. TT 0.2: SP 0.2. Nov. 1924 to Feb. 1925 Designer of bridges, Chicago, Milwaukee & St. Paul Ry., Chicago, Ill. TT 0.2: P 0.2: RC 0.2: D 0.2. Feb. 1925 to Feb. 1926 Office and Bridge Engr., U. S. National Park Service, Portland, Ore., in charge of engineering office and bridge designs and construction. TT 1: P 1: RC 1: D 1. Feb. 1926 to date Highway Bridge Engr., U. S. Bureau of Public Roads, Washington, D. C., preparing designs of standard highway bridges; checking bridge designs and specifications; special assignments on bridge problems, designs, inspections and reports. TT 2.8: P 2.8: RC 2.8: D 2.8. TT 14.5: SP 1.4: P 13.1: RC 6.6: D 9.1. Refers to G. E. Goodwin, O. L. Grover, E. F. Kelley, M. S. Ketchum, J. V. McNary, J. E. Maloney, K. H. Osborn.

1576

(10) RHODES, CHAUNCEY LEWIS, Assoc. M., P. O. Box 1184, Columbus, Ga. (Elected May 19, 1924.) (Age 37. Born Eufaula, Ala.) 1911 Completed special course in Civ. Eng., Alabama Polytechnic Inst. June 1911 to March 1912 Rodman, Levelman and Transltman, Birmingham Northwestern R. R. TT 0.4: SP 0.4. March to June 1912 Chf. of Party and Transltman with F. S. Farrar, Cons. Engr., on location and design for 50 miles of drainage canals south of Okolona, Miss. TT 0.1: SP 0.1. June 1912 to March 1913 Draftsman, Tide-water Constr. Co., Birmingham, Ala., on construction of street railway, East Lake to Ensley, plans, profiles, track layouts, computations, etc. TT 0.4: SP 0.4. March 1913 to March 1914 Draftsman, Tennessee Coal, Iron & R. R. Co., Land Dept., Birmingham, Ala. TT 0.5: SP 0.5. March 1914 to June 1915 Chf. Draftsman, Atlanta, Birmingham & Atlantic R. R., Atlanta, Ga., valuation maps, profiles, computations, etc. TT 1.2: P 1.2: RC 1.2. June 1915 to March 1918 with Southern Ry., until June 1917 as Draftsman, Computer and Chf. of Party, Valuation Dept., Washington, D. C., then Draftsman and Computer, Constr. Dept., Birmingham, in charge of general designs and computations for double-track work between Chattanooga, Tenn., and New Orleans, La. TT 2.7: P 2.7: RC 2.7. March 1918 to July 1919 2d Lieut., U. S. Army, 32d Engrs., Camp Grant, Ill., E. O. T. C., Camp Lee, Va., 546th and 23d Engrs., A. E. F.; from Nov. 1918 to June 1919 on highway repair and construction work. TT 1.3: P 1.3: RC 1.3. July 1919 to Jan. 1920 Computer, U. S. R. Administration, Atlanta. TT 0.5: P 0.5. Jan. 1920 to Jan. 1926 with Georgia State Highway Dept., until Jan. 1921 as Asst. to Div. Engr. (in charge during absence of Div. Engr.) on location and construction of highways and bridges, office work, plans and estimates; then Div. Engr., Waycross Div. (Jan. 1921 to 1924) and American Div. (1924 to 1925) in charge of location

and construction of highways and bridges, estimates and maintenance, and finally Asst. Constr. Engr. and Constr. Engr. for entire state in charge of all highway construction. TT 6: P 6: RC 6: D 6. Jan. 1926 to date County Engr., Muscogee County, Ga., on construction of system of paved highways and concrete bridges (expenditure to date \$3 000 000). TT 2.8: P 2.8: RC 2.8: D 2.8. TT 16: SP 1.4: P 1.4: RC 1.4: D 8.8. Refers to E. V. Camp, E. M. Durham, Jr., J. J. Galliard, J. H. Johnston, F. M. Joy, G. N. Mitcham, W. R. Neel, H. N. Rodenbaugh, S. B. Slack, C. M. Strahan, R. L. Totten, C. W. Wright.

1577

(15) RUSSELL, GEORGE RAYMOND, Assoc. M., Continental Oil Co., Wichita Falls, Tex. (Elected Oct. 21, 1924.) (Age 37. Born Rosedale, Kans.) Student, Civ. Eng. School, Kansas State Agricultural Coll. (1910 to 1912) and Eng. School, Kansas Univ. (1912 to 1913). TT 1: P 1. April 1913 to June 1913 City Engr., Rosedale, Kans., in complete charge of public improvements, detail design of paving, sewers and water extensions, also preliminary work on Turkey Creek Diversion Project. TT 5: P 5: RC 5. June to Nov. 1918 with Aeronautical Div., U. S. Army, Graduate, Cornell Univ. Ground School. May 1919 to May 1920 Civ. Engr., Dallas (Tex.) Property Owners Association, made property survey and prepared property classification map of Dallas, also plans of Trinity River Reclamation Project. TT 1: P 1. May 1920 to Aug. 1922 Asst. Chf. Engr., Swift & Co., Kansas City, Kans. TT 2.2: P 2.2. April 1923 to June 1924 Mech. Engr., Sinclair Refining Co. TT 1: P 1. Sept. 1924 to date with Continental Oil Co., Denver, Colo., until Jan. 1928 as Constr. Engr. in charge of construction of new equipment and maintenance and repair of all refineries, and since then Chf. Engr., Refining Div. TT 4.3: P 4.3: RC 1. TT 14.5: P 14.5: RC 6. Refers to L. Arnold, L. R. Ash, E. E. Howard, L. V. Sheridan, J. B. Stein, K. K. Wyatt.

1578

(3) SANFORD, LESTER MORSE, Assoc. M., 400 Hiram Sibley Bldg., Rochester, N. Y. (Elected Sept. 3, 1912.) (Age 43. Born Milwaukee, Wis.) 1905 to 1912 with McClintic-Marshall Constr. Co. as follows: 1905-1906 Structural Draftsman; 1906-1907 Timekeeper, Pusher and Foreman on erection of steel bridges and buildings; 1907 to 1908 Asst. Chf. Draftsman; 1908 to 1912 Structural Steel and Bridge Designer, also Designer of machinery for movable bridges and of erection equipment, identified with cantilever erection of new River Bridge, erection of viaducts along Virginian Ry., Pittsburgh & Lake Erie R. R. Bridge over Ohio River at Beaver, Pa., Missouri River Bridge at Kansas City, Iowa Central R. R. Co.'s bridge over Mississippi River at Keithsburg, Ill., Ohio Mechanics Inst., Cincinnati and two drawbridges for Missouri Pacific Ry. Co. TT 7: P 7: RC 2: D 3. 1912 to 1920 (most of time) Business Mgr. for Gen. Motors, Europe, Ltd., London, England. 1920 to 1922 Draftsman and Designer, F. L. Hughes Co., Inc., principally on Eastman School of Music and Eastman Theatre, Rochester, N. Y. TT 2: P 2: D 1. 1923 to date in private practice as Structural Engr., design and supervision of structural work for Baptist Temple Bldg., Eastman Annexes Nos. 1 and 2, Lincoln Bldg., Women's Dormitory, boiler house and five new buildings for Univ. of Rochester, Rochester Chamber of Commerce addition, office building for Rochester Gas & Elec. Corporation, Benjamin Franklin High School, etc., structural steel, reinforced concrete buildings, tunnels, foundations, chimneys, etc. TT 5: P 5: RC 3: D 2. TT 14: P 14: RC 5: D 6. Refers to R. Husselman, T. Leach, A. H. Metcalfe, R. A. Pendergrass, S. M. Plum, J. B. Reinhardt, C. F. Starr, E. H. Walker.

1579

(1) SEXTON, CLARENCE WILLIAM NEWSOME, Assoc. M., 79 St. Helens Rd., Hawthorn East B3, Victoria, Australia. (Elected Oct. 12, 1925.) (Age 38. Born Melbourne, Victoria, Australia.) Received certificates of qualification as Engr. of Water Supply and as Municipal Engr., Victoria. 1913 B. C. E., and 1921 M. C. E., Univ. of Melbourne. TT 4: P 4. Jan. to March 1911 Chairman, Instrumentman and Computer, Dept. of Home Affairs, Melbourne, Australia. Jan. to March 1912 Gen. Asst., Constr. Branch, Victorian Rys., in camp office and in field setting out work. March 1913 to Feb. 1915 Draftsman and Asst. Engr., Reinforced Concrete Co., Melbourne, on design, calculations, quantities, estimates or drawings for reinforced concrete structures. TT 1.7: SP 0.1: P 1.6: RC 1: D 1. March 1915 to Feb. 1916 Draftsman, Way and Works Branch, Victorian Rys., on design, calculations, drawings, quantities or estimates of steel railway and road bridges, etc. TT 0.6: SP 0.3: P 0.3: RC 0.1: D 0.1. Feb. 1916 to Feb. 1920 (except April to Aug. 1919 Draftsman, Designer and Estimator, Dorman, Long & Co., Ltd., England, on mill buildings and other steel structures) with Field Engrs., Australian Expeditionary Force, as Sapper, N. C. O. (3 months) and Lieut. (3½ years) on construction of abutments, temporary bridges, roads, etc., mainly in France and Belgium. TT 2.1: SP 0.3: P 1.8: RC 0.5. March 1920 to date with Melbourne Univ., until Feb. 1925 as Lecturer in Civ. Eng., in charge (under Senior Lecturer) of Hydraulic Laboratory, some lecture courses and design and drawing office work of Civ. and Hydr. Eng. Dept.; Feb. to Dec. 1925 Acting Senior Lecturer, and since Dec. 1925 Senior Lecturer in

charge (under Prof. of Eng.) of all civil and hydraulic activities, including design work, in drawing office, hydraulic and road materials testing laboratories, also management of roads in Univ. grounds, also some consulting practice, including design, plans and specifications for factory building; checking and approval of reinforced concrete buildings, etc., other works for a municipality; general supervision and checking of design of plate-girder road bridge (4 spans, 100 ft. each) including deck and reinforced concrete foundations on piles (cost approx. £50 000); investigations and reports on apparatus, defects, etc., in connection with fire sprinkler installations; tests of and reports on centrifugal pumps, etc., and (since 1925) supervision of erection of small suspension bridge; report as one of two technical advisers to Court on collapse of large reinforced concrete building, report on another large building and on pumps, etc.; at present 2d member, Municipal Surveyor's Board of Victoria. TT 8.7: P 8.7: RC 8.7: D 3.5. TT 17.1: SP 0.7: P 16.4: RC 10.3: D 4.6. Refers to G. Higgins, C. H. Kernot, M. E. Kernot, B. A. Smith, I. M. Sutherland, T. H. Upton.

## 1580

(1) THOMASSEN, VICTOR GIFFORD, Assoc. M., 97 Columbia Heights, Brooklyn, N. Y. (Elected Jan. 19, 1920.) (Age 38. Born New York City.) 1911 C. E., Cornell Univ. TT 4: P 4. Summer 1910 Rodman, Chairman and Gen. Asst. to Res. Engr., Staten Island Div., Baltimore & Ohio R. R. May 1917 to Dec. 1918 with U. S. Army, at Officers' Training Camp, Plattsburgh, N. Y., 302d Engrs., Camp Upton, N. Y., and in France, as 1st Lieut., Co. D, training combatant engineer troops, Capt., Co. C, on construction of dugouts, rifle ranges, trenches, road work, etc., and Major, 5th Engr. Training Regt., Camp A. A. Humphreys, Va., training combatant troops and on construction. TT 1.5: P 1.5: RC 1.2. July 1919 to Nov. 1920 and Nov. 1922 to Oct. 1923 Res. Engr., U. S. Steel Products Co., on design, sale, etc., of structural steel for bridges, buildings, etc., in sole charge, in France, Roumania, Serbia, Belgium and Holland, and after Nov. 1922 at Buenos Aires, Argentine, also in charge of negotiations with Uruguayan Govt. for approval of drawings for steelwork for Santa Lucia Bridge. TT 2.3: P 2.3: RC 2.3: D 1.9. July 1911 to May 1917, Jan. to June 1919, Nov. 1920 to Nov. 1922 and Oct. 1923 to date with American Bridge Co., until 1914 as Detailer on structural steel for buildings, bridges, etc., then Designer on buildings and miscellaneous steel structures; loaned to Albert Hager, Cons. Engr., New York City, as Designer on apartment houses, hotels, etc. (Oct. to Dec. 1918) and to Chile Exploration Co., New York City on structural steelwork for copper mills, on steelwork for Naval Ordnance Bldgs. at Washington; D. C. (Jan. to June 1919); Nov. 1920 to Nov. 1922 Designer (Asst. Engr.), and since Oct. 1923 Asst. Engr., Bridge Dept., New York office, on design of structural steel for railroad and highway bridges, including floor slabs and piers, development of economical arrangements in competitive design, writing specifications, negotiations with subcontractors for several structures, particularly Tacony-Palmira Bridge (under construction), across Delaware River, at Philadelphia, etc. TT 13.4: SP 1.1: P 12.3: RC 10.3: D 11.1. TT 21.2: SP 1.1: P 20.1: RC 13.8: D 13. Refers to J. H. Edwards, O. E. Hovey, S. J. Ott, J. L. Vogel, J. E. Wadsworth, G. B. Woodruff.

## FROM THE GRADE OF JUNIOR

## 1581

(1) ANDERSEN, PAUL, Jun., 357 Ninth St., Brooklyn, N. Y. (Elected June 1, 1925.) (Age 28. Born Copenhagen, Denmark.) 1923 B. S. in C. E., Royal Tech. Coll. of Copenhagen. TT 4: P 4. Feb. 1923 to April 1924 Designer and Draftsman, F. L. Smith & Co., New York City, designing, drawing and tracing structural steel and reinforced concrete structures. TT 2.2: SP 1: P 1.2. April 1924 to date Structural Engr., American Bridge Co., New York City, detailing, designing and estimating structural steel structures; also, Nov. 1926 to Aug. 1927 with Welskopf & Pickworth, Cons. Engrs., on design of structural steel for Mitsui Main Bldg., Tokyo, Japan, and Asst. Engr. for James Stewart & Co., Inc., on construction of same building, inspecting structural steel in shops and field, interpreting drawings, progress report, fabrication and erection schedules, and April to Aug. 1928 with Manning, Maxwell & Moore, Inc., Muskegan, Mich., designing and supervising drawing room and shop work for structural steel for gantry cranes for Overseas Ry. TT 4.5: P 4.5: RC 1.1. TT 10.7: SP 1: P 9.7: RC 1.1. Refers to F. L. Castleman, T. Ebashi, N. S. Fuleihan, W. H. Welskopf, E. E. Wissotsky.

## 1582

(12) CHASE, ROLLAND WHITFIELD, Jun., College, Alaska. (Elected June 16, 1924.) (Age 29. Born Bellwood, Pa.) 1922 B. S. in C. E., and 1926 C. E., Lafayette Coll. TT 4: P 4. Summer 1920 Rodman, Transitman and Leveler, Pennsylvania R. R. Oct. 1922 to July 1923 Instructor, American Univ. of Beirut, Syria, taught surveying, water supply, sewerage, descriptive geometry and applied mechanics; designed small hospital buildings and sewage disposal plant for orphanage. TT 0.7: P 0.7: D 0.1. Oct. 1923 to March 1924 Draftsman,

Export Dept., The Texas Co., drawing and tracing layouts of stations, piers, house plans, tanks, pipe lines, etc., design of houses, filling stations, piers. TT 0.3; SP 0.2; P 0.1; RC 0.1; D 0.1. April to May 1924 Inspector of sewage-disposal plant construction, Pleasantville, N. Y. May 1924 to May 1925 Technical Asst., Public Works Dept., St. Croix, Virgin Islands, in charge of construction of 1,000,000-gal. reinforced concrete reservoir and rain-water shed, drawing and tracing plans for hospital buildings, preliminary survey for location of arch dam reservoir, etc. TT 1; P 1; RC 1; D 1. May to Sept. 1925 Contr. for construction of 7-room frame dwelling, Juniata, Pa. TT 0.3; P 0.3; RC 0.3. Oct. to Dec. 1925 Draftsman, National Park Service, Portland, Ore., drawing and tracing masonry bridges. TT 0.1; SP 0.1. Jan. 1926 to date Instructor in Mathematics and Civ. Eng., also (since June 1926) Registrar, Alaska Agricultural Coll. and School of Mines, Summers with Fairbanks (Alaska) Exploration Co., as Res. Engr. on inverted syphon construction (48 in.-52 in. pipe) and drafting (1926) and Office Engr. on triangulation computations and adjustments (1927). TT 2.4; SP 0.1; P 2.3; RC 0.3. TT 8.9; SP 0.4; P 8.5; RC 1.7; D 0.3. Refers to F. O. Dufour, C. R. Johnson, C. G. Lewis, W. S. Lehr, L. Perry, G. W. Rathjens. 1522AMONT (1)

1583

(11) CORREALE, WILLIAM HERBERT, Jun., 840 Mott Ave., New York City. (Elected March 16, 1925.) (Age 28. Born New York City.) 1924 B. S., Mass. Inst. Tech. TT 4; P 4. Oct. 1924 to May 1925 Draftsman, Elec. Bond & Share Co., New York City. TT 0.4; SP 0.1; P 0.3. May to Oct. 1925 Asst. Engr. with Sanderson & Porter, New York, in field and office on construction of dam and power house at Cheat Haven, Pa., and on design of gravel and mixing plants, trestles, derrick footings and forms, part of time in charge of concrete mixing. TT 0.5; P 0.5; RC 0.1; D 0.2. Oct. 1925 to Jan. 1926 Chf. of Party with Moore & Burns, Clearwater, Fla., on surveys, some computing and plotting. TT 0.3; P 0.3; RC 0.2. Jan. to Aug. 1926 Asst. Engr. with Henry Manley, New York, on plans and specifications for industrial plant, drafting, field inspection, some design, etc. TT 0.6; P 0.6. Aug. 1926 to date Asst. Engr. with Parsons, Klapp, Brinckerhoff & Douglas, New York, assisting on three water-power development reports, construction drawings for a hydro plant, in checking design of concrete arches of Arlington Memorial Bridge and on evaluation of group of undeveloped water power, on water-power computations, designed retaining walls and switchyard structures, etc. TT 2.3; P 2.3; RC 0.3; D 0.3. TT 8.1; SP 0.1; P 8; RC 1.1; D 0.5. Refers to W. J. Douglas, E. E. Halmos, J. P. Hogan, H. Manley, Jr., E. W. Maloney, C. M. Spofford, H. H. Steinhäuser. 1522AMONT (1)

1584

(12) DOLLIVER, EMERSON, Jun., 411 Lloyd Bldg., Seattle, Wash. (Elected Jan. 14, 1924.) (Age 31. Born Milwaukee, Wis.) 1923 B. S., Coll. of Civ. Eng., Univ. of Cal. TT 4; P 4. April 1916 to Oct. 1917 Recorder and Planetableman, U. S. Geological Survey. TT 0.7; SP 0.7. June 1923 to Jan. 1924 Transitman, Marin County Surveyor's Office, San Rafael, Cal., acting as Chf. of Party relocating highways, etc. TT 0.7; P 0.7. Feb. to Dec. 1924 member of firm, Dolliver & Cuffe, San Rafael, road grading, oil macadam paving, and small concrete bridges for Marin County and Town of Larkspur. TT 0.9; P 0.9; RC 0.9. March to April 1925 Chf. of Field Party, Marin Municipal Water Dist., San Rafael, pipe-line survey, etc. TT 0.2; P 0.2; RC 0.2. May to Dec. 1925 and May to July 1926 Chf. of Party, Concrete Designer and Office Engr., Marin County Surveyor's office on highway location and relocation and design of concrete bridges, including three arch bridges (spans 36, 45 and 105 ft.). TT 0.9; P 0.9; RC 0.9; D 0.2. Jan. to April 1926 Chf. of Party and Water-Works Designer for H. S. Bonte, Engr., Bolinas (Cal.) Public Utility Dist., on field work for design and on design of gravity water system. TT 0.3; P 0.3; RC 0.3; D 0.1. Aug. to Dec. 1926 Chf. of Party for R. W. Van Norden, on field work for preliminary report on power projects on Deer Creek and Golden Feather projects in Butte and Tehama Counties, Cal. TT 0.5; P 0.5; RC 0.5. Jan. to March 1927 Office Engr. with Belcher & Hussey, Engrs., on office work for laying out subdivisions, curved layouts, lot calculations, etc. TT 0.2; P 0.2. April 1927 to date San. Engr., Wallace & Tierhan Co., Newark, N. J., on problems relating to chlorination of water supplies and sewage works, at San Francisco and later at Seattle, Wash. TT 1.6; P 1.6; TT 10; SP 0.7; P 9.3; RC 2.8; D 0.3. Refers to H. S. Bonte, R. E. Davis, C. Derleth, Jr., C. G. Hyde, G. D. Peet, R. W. Van Norden. 1522AMONT (1)

1585

(4) HAZARD, HENRY NEW, Jun., 21 West Church St., Bethlehem, Pa. (Elected Oct. 10, 1927.) (Age 26. Born Des Moines, Iowa.) 1924 C. E., Rens. Pol. Inst. TT 4; P 4. Summer 1921 and 1922 with Lackawanna Bridge Co. as Asst. Engr. on mill building construction at Tonawanda, N. Y., and setting building foundations, Buffalo, N. Y., and Res. Engr. on construction of Ford Plant at Green Island, N. Y., and Buffalo (N. Y.) Athletic Club, all for Lackawanna Bridge Co. Summer 1923 Asst. Engr., Bethlehem (Pa.) Steel Co., on erection of Hill to Hill Bridge and of three girder spans for Lehigh & New England R. R. July 1924 to Aug. 1925 with Worden-Allen Co., Milwaukee, until Oct. 1924 as Draftsman, then Res.

Engr. on erection of sub-power station at Lyons, Ill., cast-house and skip incline for Youngstown Sheet & Tube Co. and high line for blast furnace at Inland Steel Co., Indiana Harbor, Ind. TT 1.1: P 1.1. Aug. 1925 to date with Bethlehem Steel Co., until Jan. 1928 as Res. Engr. of three through-girder spans for Lehigh-Hudson River R. R. at Warwick, N. Y., ear shops for Rapid Transit Comm. at Coney Island, N. Y., Buffalo-Ft. Erie Bridge over Niagara River, at Buffalo, additions to Company's Sparrows Point (Md.) plant and Elizabeth-Howland Hook Bridge for Port of New York Authority at Elizabeth, N. J., from Jan. to July 1928 Engr.-in-Chg. on erection of Hahnemann Hospital (22 stories), Philadelphia, Pa., and taking out old and erecting new spans for Lehigh Valley R. R. crossing of Pennsylvania R. R. at Newark, N. J., and after July 1928 Erection Engr. for New York Dist. TT 3.3: P 3.3: RC 1.1. TT 8.4: P 8.4: RC 2.9. Refers to W. J. Boucher, L. W. Clark, C. W. Dunham, W. A. Hazard, R. T. Robinson.

## 1586

(10) JAGGER, JAMES EDWIN, Jun., Alabama Water Service Co., Birmingham, Ala. (Elected March 15, 1926.) (Age 26. Born Holyoke, Mass.) 1924 B. S., Mass. Inst. Tech. TT 4: P 4. Summer 1921 Asst. to Res. Engr., summer 1922 Field Engr., and summer 1923 Res. Engr., Holyoke (Mass.) Water Power Co., on hydro-electric development, laying out work, lines, grades, equipment, etc.; Chf. of Party on surveys. July 1924 to Feb. 1926 Engr., Stone & Webster, Inc., on Bartlett's Ferry Hydro-Electric Development, Columbus, Ga., being Chf. of Party on layout work; drafting and designing in field office; installation of equipment. TT 1.1: SP 0.5: P 0.6: RC 0.2: D 0.4. Feb. 1926 to Feb. 1928 Engr., Robert L. Totten, Inc., Cons. Engrs., Birmingham, Ala., drafting, designing and cost estimates; Res. Engr., new water-supply systems at Opelika and York, Ala., and new sanitary sewer system at Prichard, Ala. TT 2: P 2: RC 1.8: D 0.2. Feb. 1928 to date Asst. Chf. Engr., Alabama Water Service Co., Birmingham, Ala., in charge of construction of 4 miles 24-in. transmission main, Bessemer, Ala., designing and cost estimates for purification plants, preliminary surveys, new water supplies. TT 0.9: P 0.9: RC 0.3: D 0.4. TT 8: SP 0.5: P 7.5: RC 2.3: D 1. Refers to R. E. Barrett, L. V. Branch, J. H. Mayer, C. M. Spofford, W. G. Stromquist, R. L. Totten.

## 1587

(1) JEUNE, JAMES FREDERICK DUDLEY, Jun., Town Clerk, Temuka, South Canterbury, New Zealand. (Elected Aug. 29, 1927.) (Age 31. Born Christchurch, New Zealand.) 1923 Associate, Canterbury Univ. Coll. School of Eng. TT 4: P 4. Vacations 1920 to 1923 on surveys, Jan. 1924 to July 1926 Engr. Asst. on survey and construction of Lake Coleridge hydro-electric power scheme, and July 1926 to April 1927 in Head Office at Wellington, on design of hydro-electric schemes of New Zealand, all for New Zealand Public Works Dept. TT 3.2: P 3.2: RC 1: D 1.7. April to Aug. 1927 Engr. to Contrs. on construction of rope road to coal mine. TT 0.3: P 0.3: RC 0.3. Sept. 1927 to Jan. 1928 Engr. in charge of road construction, North Canterbury, New Zealand. TT 0.3: P 0.3: RC 0.3. Jan. 1928 to date Town Clerk and Engr. to Borough of Temuka, South Canterbury. TT 0.9: P 0.9. TT 8.8: P 8.8: RC 1.7: D 1.7. Refers to H. M. Chrystall, F. W. Luke. (Applies in accordance with Sec. 1, Art. I, of the By-Laws.)

## 1588

(9) OLIVER, WILLIAM ALBERT, Jun., 1719 East Eighty-First St., Cleveland, Ohio. (Elected March 16, 1925.) (Age 30. Born Thedford, Ont., Canada.) 1922 B. S. E. in C. E., Univ. of Mich. 1923 M. S. in C. E., Univ. of Ill. TT 4: P 4. June 1922 to Sept. 1923 Plant Engr., American Malleables Co., Owosso, Mich., in charge of new construction. TT 1.2: P 1.2. Sept. 1923 to June 1925 Instructor in Mathematics, Beloit (Wis.) Coll. TT 1.5: P 1.5. June to Sept. 1924 Instrumentman, City of Beloit. TT 0.2: SP 0.2. June 1925 to Sept. 1926 Structural Engr., Office of State Archt. and Engr., Columbus, Ohio, in charge of structural design. TT 1.2: P 1.2: RC 1.2: D 1.2. Sept. 1926 to Sept. 1927 Structural Designer with Orbison & Orbison, Cons. Engrs., Appleton, Wis. TT 1: P 1. Sept. 1927 to June 1928 graduate student, Univ. of Illinois. Sept. 1928 to date Instructor in Civ. Eng., Case School of Applied Science, Cleveland, Ohio, teaching structural design and statically indeterminate structures. TT 0.2: P 0.2. TT 9.3: SP 0.2: P 9.1: RC 1.2: D 1.2. Refers to H. Cross, W. C. Huntington, M. S. Ketchum, F. H. Neff, F. E. Richart, W. M. Wilson.

## 1589

(3) SANDBECK, HANS CHRISTIAN, Jun., 27 Holmes St., Poughkeepsie, N. Y. (Elected June 7, 1926.) (Age 28. Born Oslo, Norway.) 1924 B. S., National Inst. Tech. (Norges Tekniske Høiskole). TT 4: P 4. Aug. 1924 to May 1925 Draftsman with Geo. F. Hardy, Archt. and Engr., New York City, drafting, steel and concrete design. TT 0.8: P 0.8. May to June 1925 Designer, Hydr. Dept., Elec. Bond & Share Co., New York City, on reinforced concrete for water power plants. TT 0.1: P 0.1. June 1925 to Aug. 1926 Designer, Local Eng. Dept., Standard Oil Co. of New Jersey, Elizabeth, N. J., on design and detailing of

steel, concrete and timber structures, architectural and structural design of industrial buildings and alterations. *TT 1.1: P 1.1.* Aug. to Nov. 1926 Checker, Wilputte Coke Oven Co., New York City, checking design drawings of steel and concrete for coke-oven plants. *TT 0.3: P 0.3.* Nov. 1926 to March 1927 Designer with Francisco & Jacobus, Archts. and Engrs., New York City, on design of concrete and steel factory buildings, flat slab and beam design. *TT 0.3: P 0.3.* March to April 1927 Designer, Ready Mixed Concrete of New York, on design of central mixing plant and layout of conveying equipment. *TT 0.1: P 0.1: RC 0.1.* April 1927 to date Asst. Structural and Hydr. Engr., Central Hudson Gas & Elec. Corporation, Poughkeepsie, N. Y., on hydraulic and economic studies, engineering reports, design and specifications for hydraulic structures, transmission lines, substations and buildings, supervision of drafting and ordering material. *TT 1.7: P 1.7: RC 1.5: D 1.* *TT 8.4: P 8.4: RC 1.6: D 1.* Refers to O. H. Bundy, T. A. Corby, H. R. Dean, W. A. Schuerman, E. A. Van Deusen.

## 1590

(3) SHAW, GERALD EDISON, Jun., Room 401, Windsor St. Station, Montreal, Que., Canada. (Elected July 6, 1925.) (Age 27. Born Windsor, Ont., Canada.) 1924 B. Sc., and 1925 M. Sc., McGill Univ. *TT 4: P 4.* Sept. 1919 to Sept. 1920 Draftsman, tracing, detailing, etc., and summers 1921-1924 Laborer, and Draftsman detailing bridges, buildings and transmission towers, for Canadian Bridge Co., Walkerville, Ont., Canada. *TT 0.5: SP 0.5.* Sept. 1924 to May 1925 graduate student, McGill Univ. Laboratory. May 1925 to date Engr., Bridge Dept., Canadian Pacific Ry. Co., Montreal, Que., Canada, designing. *TT 3.5: P 3.5: RC 3.5: D 3.5.* *TT 8: SP 0.5: P 7.5: RC 3.5: D 3.5.* Refers to J. M. R. Fairbairn, R. deL. French, H. M. MacKay, P. B. Motley, F. P. Shearwood.

## 1591

(1) WEINRIB, JACOB JAY, Jun., 119-34 One Hundred Eightieth St., St. Albans, N. Y. (Elected March 14, 1927.) (Age 28. Born New York City.) Licensed Prof. Engr. and Land Surveyor, New York State. 1922 C. E., Rens. Pol. Inst. *TT 4: P 4.* Summer 1920 Draftsman with H. A. Schwenesen, Cons. Engr., Jamaica, N. Y., on design and cost estimating of ore-refining plants. May to June 1922 Investigator with M. Rome, Troy, N. Y., on carrying capacities of warehouses and structures, design and supervision of alterations. *TT 0.1: P 0.1: RC 0.1.* June to Aug. 1922 Field Engr. and Draftsman, Lyon Eng. Constr. Co., New York City, estimating and design, loft, office and apartment buildings. *TT 0.2: P 0.2: RC 0.1.* Aug. to Sept. 1922 Designer, Conveying Weigher Co., New York City, on conveying systems for coal and ore handling, structural detailing. *TT 0.2: P 0.2: D 0.2.* Sept. 1922 to March 1923 Field Engr., Werner Boecklin Co., Kew Gardens, N. Y., in charge of land developing, city surveys and construction of country houses. *TT 0.5: P 0.5: RC 0.4.* March to Aug. 1923 Supt. of Constr., Eastern Contr. Co., Brooklyn, N. Y., in charge of construction of reinforced concrete buildings, tanks, fire walls and general gas works construction. *TT 0.4: P 0.4: RC 0.4.* Sept. to Dec. 1923 Engr. of Constr., John F. O'Rourke Eng. Constr. Co., New York City, in charge of construction of foundations for high buildings, shoring, underpinning, pile driving and reinforced concrete construction. *TT 0.3: P 0.3: RC 0.3.* Jan. 1924 to March 1925 Designing Draftsman, Board of Transportation, New York City, design of Rapid Transit R. R. construction, subway, tunnel and open-cut construction. *TT 1.2: P 1.2: D 1.2.* April to Aug. 1925 Engr. of Constr., Gen. Baking Co., New York City, on design and construction of alterations and new factory buildings; Asst. to Chf. Engr. in charge of construction and maintenance of all plants. *TT 0.4: P 0.4: RC 0.3: D 0.1.* Aug. 1925 to March 1927 Supt. of Constr., until Oct. 1925 with Deutsch & Schneider, Archts., New York City, in charge of construction of an institutional building, then with Weinrib Realty Corporation, Richmond Hill, N. Y., in charge of development of commercial and residential buildings at Jamaica and St. Albans, N. Y., and after July 1926 with F. E. O'Rourke & Co., Long Island City, N. Y., in charge of design and construction of industrial buildings and warehouses, expediting, purchasing and supervising construction, estimating. *TT 1.7: P 1.7: RC 1.7: D 0.3.* April 1927 to date Constr. Engr., until Nov. 1927 at Schenectady, N. Y., in charge on large commercial and office building and smaller projects, and since then with Pan American Petroleum & Transport Co., New York City, on designs and estimates of docks, warehouses, commercial and office buildings, residences, piers, bulkheads, tanks, pipe lines, etc., and miscellaneous engineering work. *TT 1.7: P 1.7: RC 1.5: D 0.6.* *TT 10.8: P 10.8: RC 4.9: D 2.4.* Refers to L. L. Balleisen, M. Birman, A. Hinrichs, E. L. Lavine, A. M. McKean, Jr., J. Mechanic.

*The Board of Direction will consider the applications in this list not less than thirty days after the date of its issue.*

